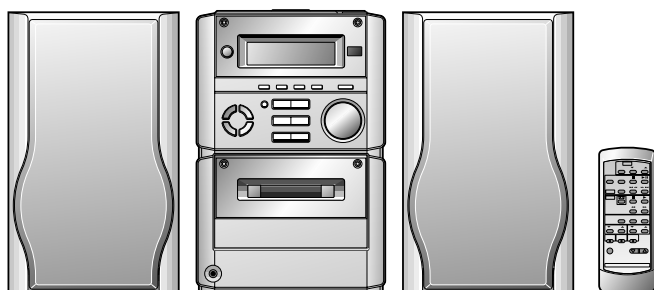


SHARP SERVICE MANUAL

No. S2007XL40H///



COMPACT
disc
DIGITAL AUDIO



SAVING ENERGY
STAND-BY POWER
CONSUMPTION **0.6W**

Illustration: XL-40H

XL-40H

XL-50H

XL-40H/XL-50H Micro Component System consisting of XL-40H/XL-50H (main unit) and CP-XL40H/CP-XL50H (speaker system).

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified should be used.

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FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SAFETY PRECAUTION FOR SERVICE MANUAL

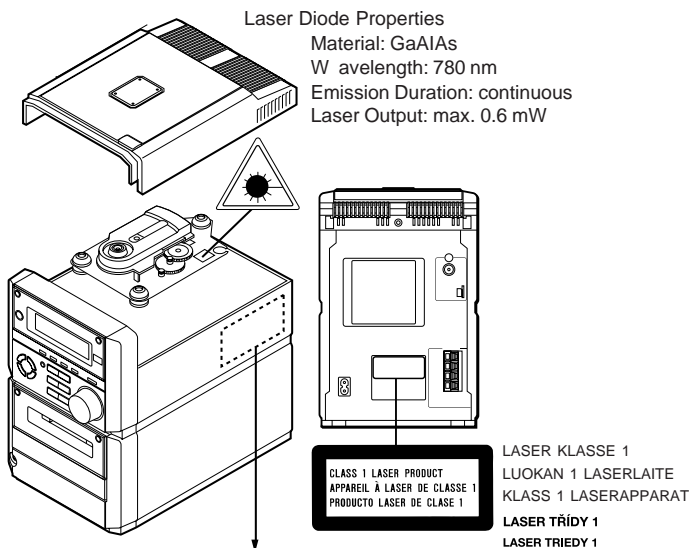
Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the Laser beam

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position other than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAI NI TULLA TAVALLA SAATTAÄ ALTI STAA KÄYTTÄJÄN TURVALLI SUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

WARNING - OM APPARATEN ANVÄNDS PÅ ANNAT SÄTT ÄN I DENNA BRUKSANVI SNIG SPECIFICERAS. KAN ANVÄNDAREN UTSÄTTAS FÖR OSYNLIG LASERSTRÅLNING, SOM ÖVERSKRIDER GRÄNSEN FÖR LASERKLASS 1.



CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLNING VED ÅBNING. SE IKKE IND I STRÅLEN-HELLER IKKE MED OPTISKE INSTRUMENTER.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN ÄLÄKÄ KATSO SITA OPTISEN LAITTEEN LAPI.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

ADVERSEL-USYNLIG LASERSTRÅLNING NÄR DEKSEL ÖPNES. STIRRA IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

SPECIFICATIONS

XL-40H/50H

● General

Power source: AC 230 V, 50 Hz

Power consumption: 26 W

Dimensions: Width; 160 mm (6-5/16")
Height; 241 mm (9-1/2")
Depth; 249 mm (9-13/16")

Weight: 2.7 kg (6.0 lbs.)

● Amplifier section

Output power: PMPO; 28 W (total)
MPO; 14 W (7 W + 7 W)
(DIN 45 324)
RMS; 10 W (5 W + 5 W)
(DIN 45 324)

Output terminals: Speakers; 4 ohms
Headphones; 16-50 ohms
(recommended; 32 ohms)

● Compact disc player section

Type: Compact disc player

Signal readout: Non-contact, 3-beam semiconductor laser pickup

D/A converter: 1-bit D/A converter

Filter: 8-times oversampling digital filter

Frequency response: 20 - 20,000 Hz

Wow and flutter: Unmeasurable
(less than 0.001% W. peak)

● Tuner section

Frequency range: FM; 87.5-108 MHz
AM; 522-1,620 kHz

● Cassette deck section

Frequency response: 50 - 14,000 Hz (Normal tape)

Signal/noise ratio: 50 dB

Wow and flutter: 0.3 % (DIN 45 511)

CP-XL40H/50H

● Speaker section

Type: Full range speaker system

Speakers: 10 cm (4") full-range speaker

Rated input power: 5 W

Maximum input power: 10 W

Impedance: 4 ohms

Dimensions: Width; 145 mm (5-3/4")
Height; 240 mm (9-1/2")
Depth; 191 mm (7-1/2")

Weight: 1.3 kg (2.9 lbs.)/each

Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

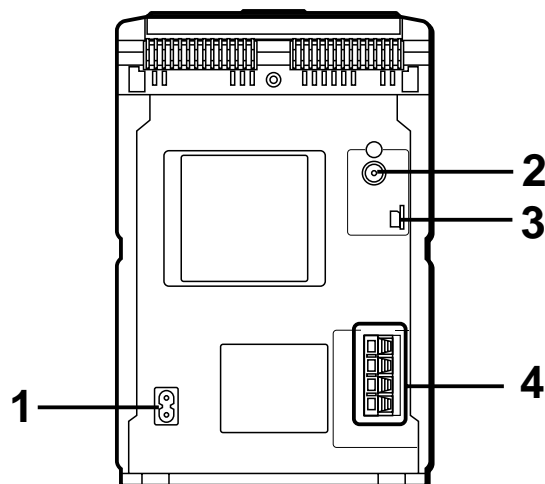
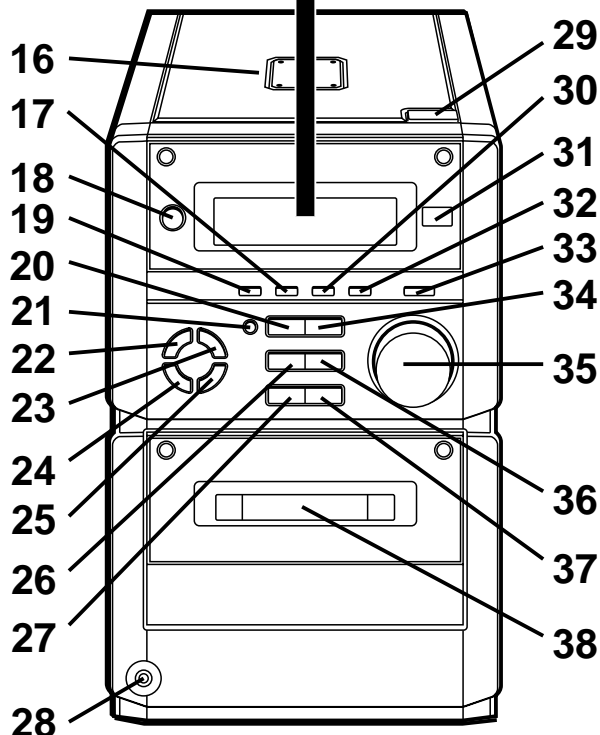
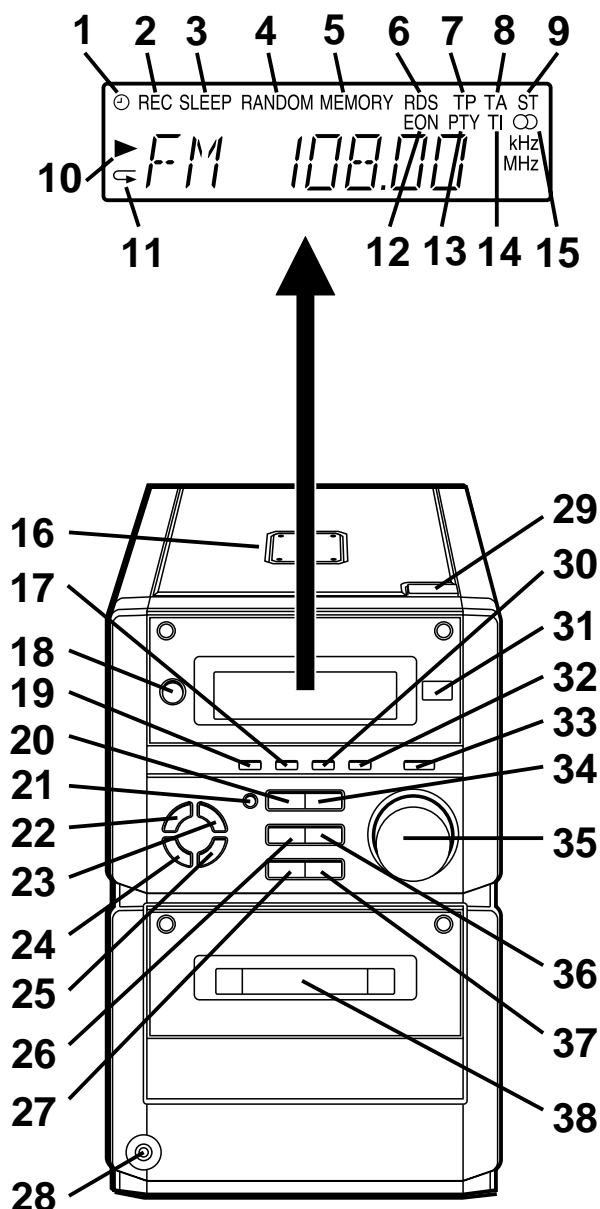
XL-40H/50H

■ Front panel

1. Timer Indicator
2. Record Indicator
3. Sleep Indicator
4. (CD) Random Indicator
5. (CD/TUNER) Memory Indicator
6. RDS Indicator
7. Traffic Programme Indicator
8. Traffic Announcement Indicator
9. FM Stereo Mode Indicator
10. (CD) Play Indicator
11. (CD) Repeat Indicator
12. EON Indicator
13. Programme Type Indicator
14. Traffic Information Indicator
15. FM Stereo Indicator
16. CD Compartment
17. EON Button
18. On/Stand-by Button
19. Programme Type/Traffic Information Search Button
20. (CD/TAPE) Stop Button
(TUNER) Memory Clear Button
21. Record Pause Button
22. Bass/Treble Selector Button
23. Memory/Set Button
24. Clock/Timer/Sleep Button
25. Band Selector Button
26. (CD) Review Button
(TAPE) Rewind Button
(TUNER) Tuning Down Button
27. Function Selector Button
28. Headphone Socket
29. CD Eject Button
30. ASPM Button
31. Remote Control Sensor
32. Display Mode Selector Button
33. Volume Select Button
34. (CD) Play/Pause Button
(TAPE) Play Button
35. Jog Dial
36. (CD) Cue Button
(TAPE) Fast Forward Button
(TUNER) Tuning Up Button
37. Volume/Jog Dial Selector Button
38. Cassette Compartment

■ Rear panel

1. AC Power Input Socket
2. FM 75 ohms Aerial Socket
3. AM Loop Aerial Input Socket
4. Speaker Terminals

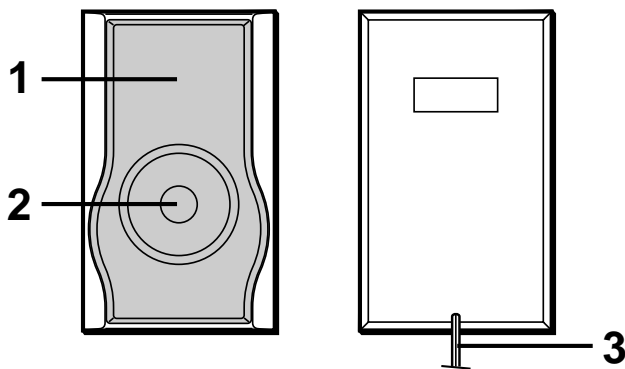


XL-40H/50H

CP-XL40H/50H

■ Speaker section

1. Bass Reflex Duct
2. Full-Range Speaker
3. Speaker Wire



XL-40H/50H

■ Remote control

1. Remote Control Transmitter LED

● Tuner control section

2. Programme Type/Traffic Information Search Button
3. Preset Up/Down Buttons

● CD control section

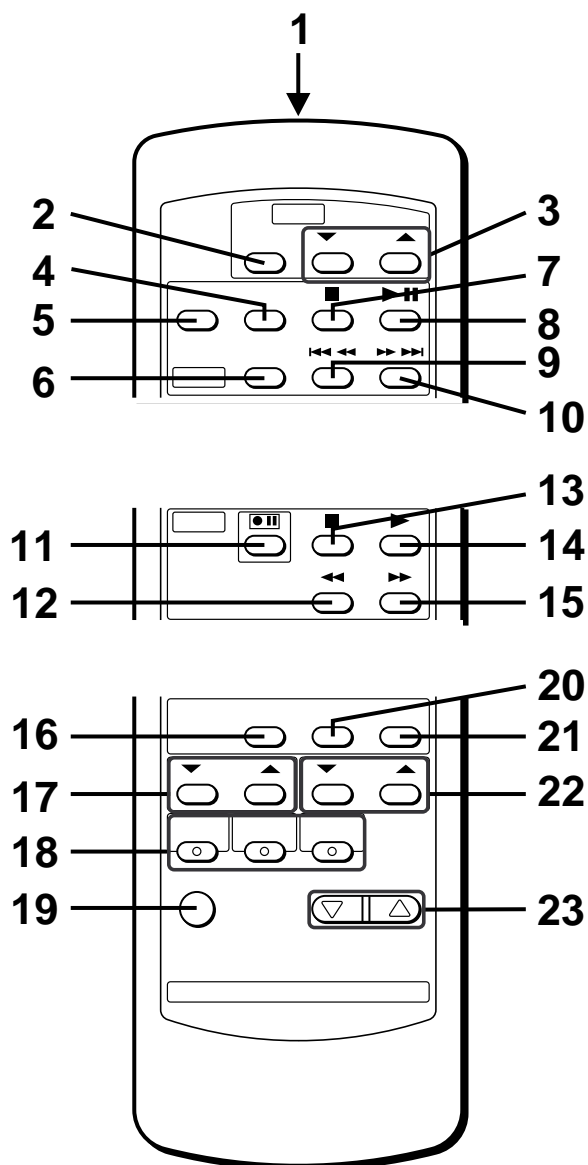
4. Clear Button
5. Random/Repeat Button
6. Memory Button
7. Stop Button
8. Play/Pause Button
9. Track Down/Review Button
10. Track Up/Cue Button

● Tape control section

11. Record Pause Button
12. Rewind Button
13. Stop Button
14. Play Button
15. Fast Forward Button

● Common section

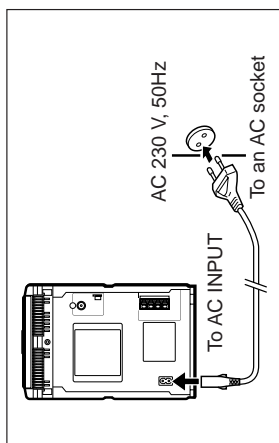
16. Sleep Button
17. Bass Up/Down Buttons
18. Function Selector Buttons
19. On/Stand-by Button
20. Timer Button
21. Clock Button
22. Treble Up/Down Buttons
23. Volume Up/Down Buttons



OPERATION MANUAL

PREPARATION FOR USE

Connecting the AC power lead

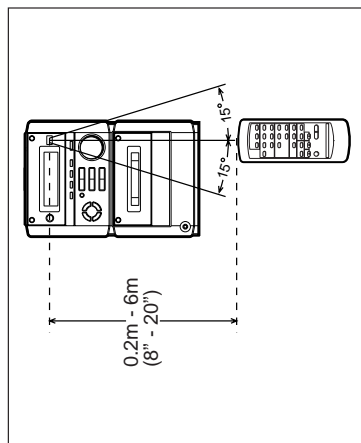


Connect the AC power lead to the AC power input socket, then connect the AC power lead plug to an AC socket.

Notes:

- Unplug the AC power lead from the AC socket if the unit is not to be used for a prolonged period of time.
- Never use a power lead other than the one supplied. Otherwise, a malfunction or an accident may occur.

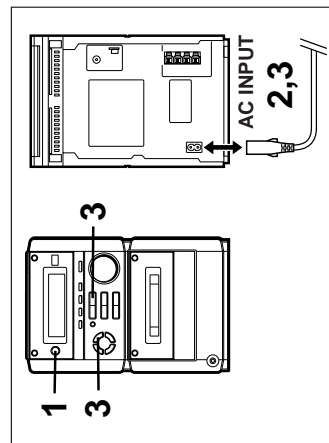
Remote control



Notes concerning use:

- Replace the batteries if the operating distance is reduced or if the operation becomes erratic.
- Periodically clean the transmitter LED on the remote control and the sensor on the main unit with a soft cloth.
- Exposing the sensor on the main unit to strong light may interfere with operation. Change the lighting or the direction of the unit.
- Keep the remote control away from moisture, excessive heat, shock, and vibrations.

RESETTING THE MICROCOMPUTER



Reset the microcomputer under the following conditions:

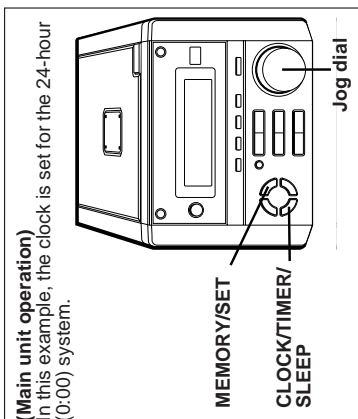
- To erase all of the stored memory contents (clock and timer settings, and tuner and CD presets).
- If the display is not correct.
- If the operation is not correct.

- 1 Press the ON/STAND-BY button to enter the stand-by mode.
- 2 Unplug the AC power lead from the AC INPUT socket on this unit.
- 3 Whilst pressing down the MEMORY/SET button and the 0 button, plug the AC power lead into the AC INPUT socket on this unit.

Caution:

- The operation explained above will erase all data stored in memory, such as clock and timer settings, and tuner and CD presets.

SETTING THE CLOCK

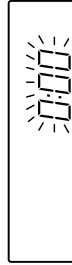


- 1 Press the CLOCK/TIMER/SLEEP button to enter the time check mode.

- 2 Within 3 seconds, press the MEMORY/SET button.



- 3 Turn the jog dial to select the time display mode.



0:00 ← AM 12:00

"0:00" → The 24-hour display will appear.

(0:00 - 23:59)

"AM 12:00" → The 12-hour display will appear.

(AM 12:00 - PM 11:59)

- Note that this can only be set when the unit is first installed or it has been reset (see page 26).

- 4 Press the MEMORY/SET button.



- 5 Adjust the hour by turning the jog dial.

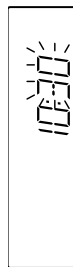


- When the jog dial is turned one click clockwise, the time will increase by 1 hour. When it is turned one click anti-clockwise, the time will decrease by 1 hour.
- Keep turning the jog dial to change the time continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

- 6 Press the MEMORY/SET button.



- 7 Adjust the minutes by turning the jog dial.

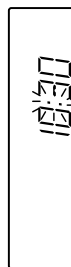


- When the jog dial is turned one click clockwise, the time will increase by 1 minute. When it is turned one click anti-clockwise, the time will decrease by 1 minute.

Keep turning the jog dial to change the time continuously.

- The hour setting will not advance even if minutes advance from "59" to "00".

- 8 Press the MEMORY/SET button.



- The clock starts operating from "0" second. (Seconds are not displayed.)

Note:

- In the event of a power failure or when the AC power lead is disconnected, the clock display will go out.

When the AC power supply is restored, the clock display will flash on and off to indicate the time when the power failure occurred or when the AC power lead was disconnected.

If this happens, follow the procedure below to change the clock time.

To change the clock time:

Perform steps 1, 2 and 4 - 8 above.

To change the time display mode:

- 1 Perform steps 1 - 3 in the section "RESETTING THE MICROCOMPUTER", on page 26.

- 2 Perform steps 1 - 8 above.

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

XL-40H/50H

STEP	REMOVAL	PROCEDURE	FIGURE
1	Side Panel(Left/Right)	1. Screw (A1) x8	6-1
2	Top Cabinet Switch PWB	1. Screw (B1) x1 2. Socket (B2) x2	6-1
3	Rear Panel	1. Screw (C1) x2	6-1
4	Main PWB/ Headphones PWB	1. Screw (D1) x3 2. Screw (D2) x2 3. Bracket (D3) x1 4. Socket (D4) x3 5. Flat wire (D5) x1 6. Socket (D6) x1	6-2
5	Jog Switch PWB	1. Socket (E1) x1 2. Screw (E2) x2 3. Knob (E3) x1	6-2
6	Display PWB/ LED PWB (With Jog Motor Flame)	1. Screw (F1) x2 2. Screw (F2) x3 3. Bracket (F3) x1 4. Socket (F4) x1 5. Hook (F5) x2 6. Hook (F6) x2	6-2
7	Front Panel	1. Screw (G1) x1 2. Socket (G2) x1 3. Screw (G3) x1	6-2
8	Power PWB	1. Screw (H1) x4 2. Screw (H2) x1 3. Screw (H3) x1 4. Bracket (H4) x1	6-2
9	Tape Mechanism	1. Open the cassette holder 2. Screw (J1) x4	6-3
10	CD PWB/ Open Close Switch PWB (Note)	1. Screw (K1) x3 2. Hook (K2) x2 3. Socket (K3) x3	6-4
11	CD Mechanism	1. Screw (L1) x3	6-4

XL-40H/50H

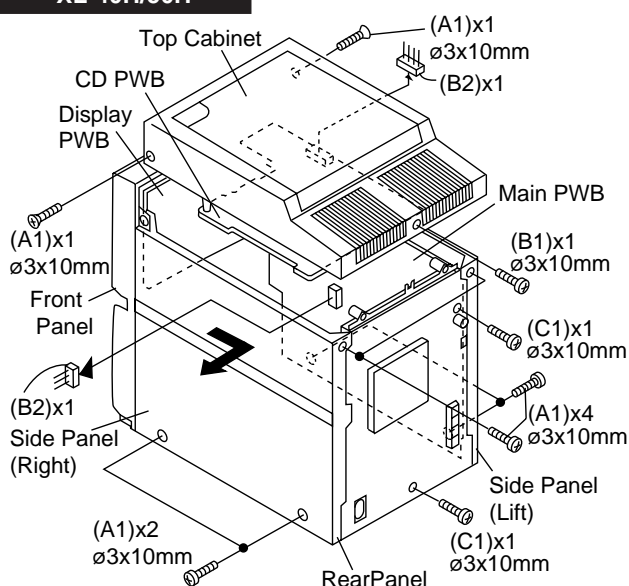


Figure 6-1

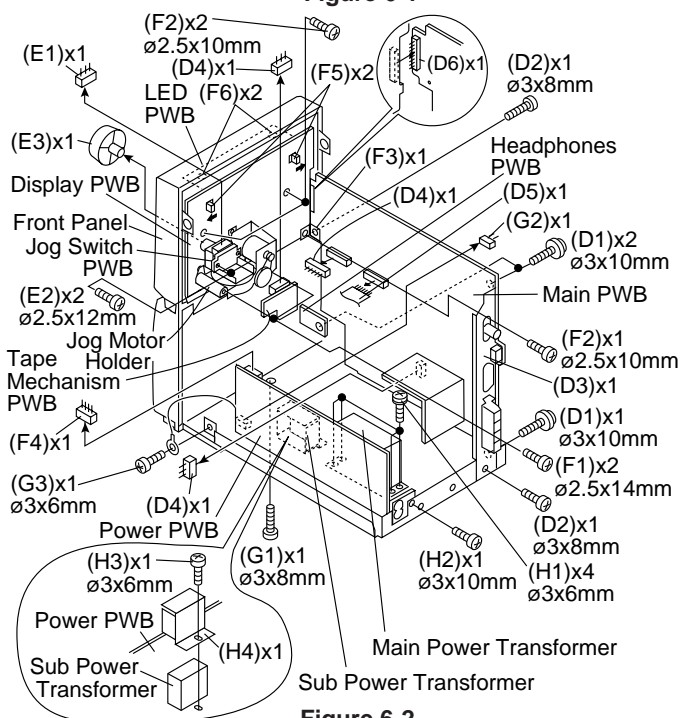


Figure 6-2

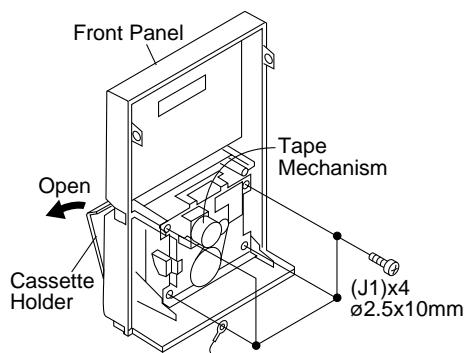


Figure 6-3

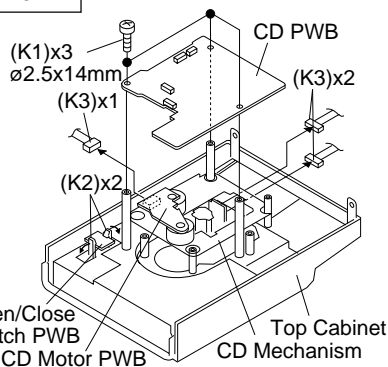


Figure 6-4

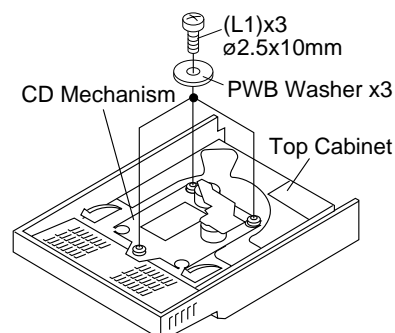


Figure 6-5

Note:

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

CP-XL40H/50H			
STEP	REMOVAL	PROCEDURE	FIGURE
1	Speaker	1. Front panel (A1) x1 2. Screw (A2) x4	7-1

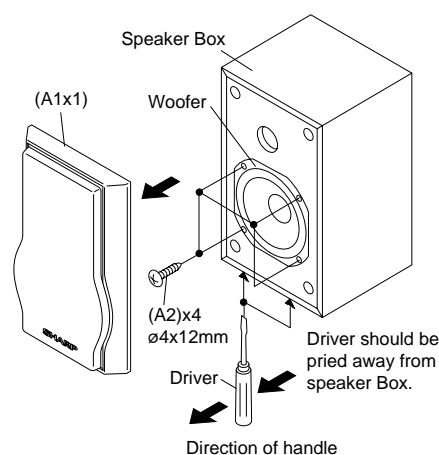


Figure 7-1

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 7 and 9 of the disassembly method to remove the tape mechanism. (See page 6.)

How to remove the record / playback and erase heads (See Fig. 7-2.)

1. Remove the screws (A1) x 2 pcs., to remove the erase head.
2. Remove the screws (A2) x 2 pcs., to remove the record/playback head.

Note:

After replacing the heads and performing the azimuth adjustment, be sure to apply screwlock.

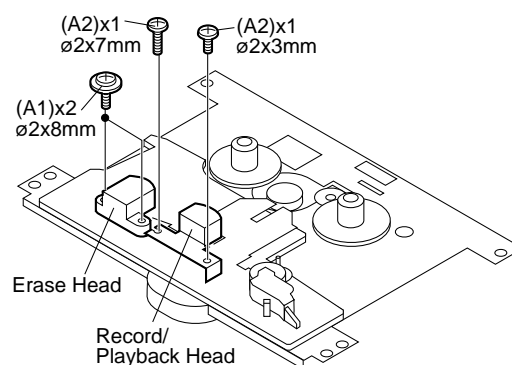


Figure 7-2

How to remove the pinch roller (See Fig. 7-3.)

1. Carefully bend the pinch roller pawl in the direction of the arrow <A>, and remove the pinch roller (B1) x 1 pc., upwards.

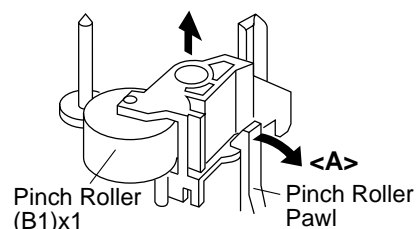


Figure 7-3

How to remove the belts (See Fig. 7-4.)

1. Remove the main belt (C1) x 1 pc., from the motor pulley.
2. Remove the FF/REW belt (C2) x 1 pc., from the REW/FF roller.
3. Put on the belts in the reverse order of removal.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

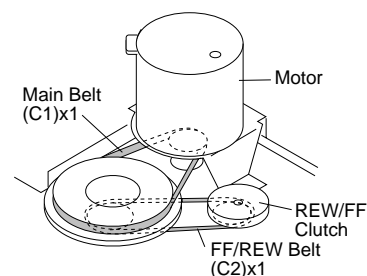


Figure 7-4

How to remove the motor (See Figs. 7-5.)

1. Remove the mainbelt.
2. Remove the screws (D1) x 2 pcs., to remove the motor bracket.
3. Remove the screws (D2) x 3 pcs., to remove the motor.

Note:

When mounting the motor, pay attention to the motor mounting angle

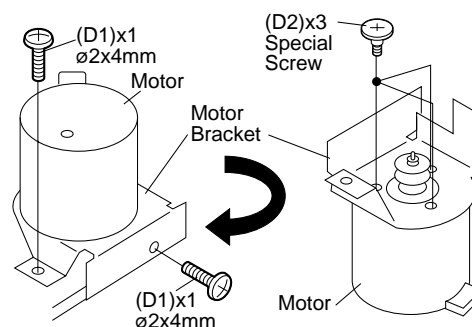


Figure 7-5

XL-40H/50H

How to remove the flywheel (See Fig. 8-1.)

1. Remove the belt.
2. Remove the stop washer (E1) x 1 pc., with a small precision screwdriver to extract the flywheel from the capstan metal.

Note:

When the stop washer is deformed or damaged, replace it with a new one.

How to reinstall the parts

Install each part in the reverse order of the removal with care.

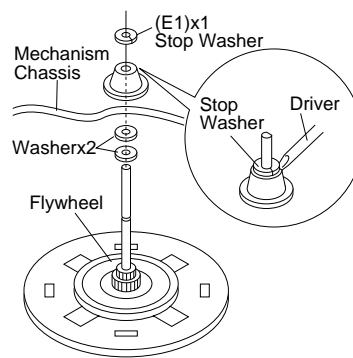


Figure 8-1

How to remove the tape mechanism PWB (See Fig. 8-2.)

1. Remove the screws (F1) x 1 pc., to remove the tape mechanism PWB.
2. Remove the screws (F2) x 1 pc.
3. Remove the solder joints (F3) x 2 pcs., to remove the tape mechanism PWB.

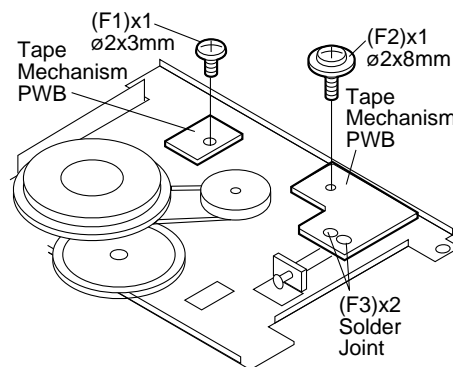


Figure 8-2

How to remove the jog motor (See Figs. 8-3.)

1. Remove the side panel and top cabinet.
2. Remove the jog belt (G1) x 1 pc., from the motor pulley.
3. Remove the screws (G2) x 2 pcs., to remove the jog motor.

Note:

When putting on the belt, ascertain that the belt is not twisted, and clean it.

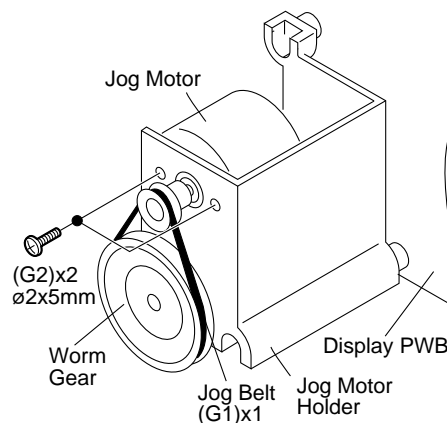


Figure 8-3

CD MECHANISM SECTION

Perform steps 1, 2 and 10, 11 of the disassembly method to remove the CD mechanism.

How to remove the pickup (See Fig. 8-4)

1. Remove the mechanism cover, paying attention to the pawls (A1) x 4 pcs.
2. Remove the screws (A2) x 2 pcs., to remove the shaft (A3) x 1 pc.
3. Remove the stop washer (A4) x 1 pc., to remove the gear (A5) x 1 pc.
4. Remove the pickup.

Note:

After removing the optical pickup connector wrap the front end of connector in conductive aluminium foil so as to prevent damage of optical pickup by static electricity.

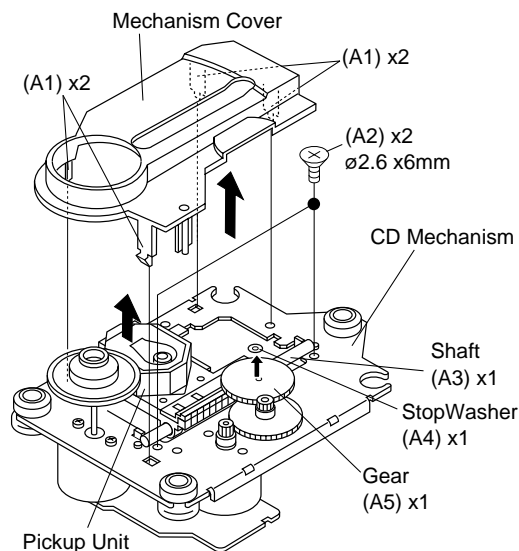


Figure 8-4

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2412	Over 80 g

• Torque Check

Torque Meter	Specified Value
Play: TW-2111	30 to 60 g. cm
Fast forward: TW-2231	55 to 140 g.cm
Rewind: TW-2231	55 to 140 g.cm

• Tape Speed

Test Tape	Adjusting Point	Specified Value	Instrument Connection
MTT-111	Variable resistor in motor.(M901)	3,000 \pm 90 Hz	Headphone terminal

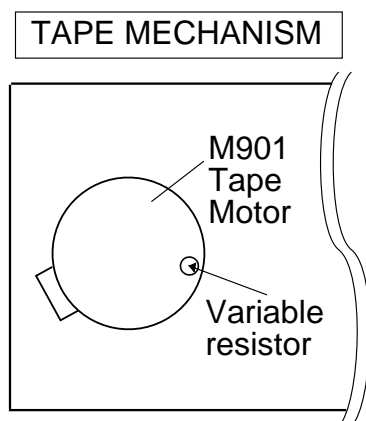


Figure 9-1 ADJUSTMENT POINT

TUNER SECTION

fL: Low-range frequency

fH: High-range frequency

• AM IF/RF

Signal generator: 400 Hz, 30%, AM modulated

Frequency	Frequency	Display	Setting/Adjusting Parts	Instrument Connection
IF	450 kHz	1,620 kHz	T351	*1
AM Band Coverage	—	522 kHz	(fL): T306 1.1 \pm 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T302	*1

*1. Input: Antenna, Output: Speaker Terminal

*2. Input: Input is not connected, Output: TP301

• Setting the Test Mode

Keeping the FF/FWD button and MEMORY/SET button pressed, turn on POWER. Then, the frequency is initially set in the memory as shown in Table. Call it with the JOG DIAL knob to use it for adjustment and check of tuner circuit.

Preset No.	FM	Preset No.	AM
1	87.50 MHz	6	522 kHz
2	108.00 MHz	7	1,620 kHz
3	98.00 MHz	8	990 kHz
4	90.00 MHz	9	603 kHz
5	106.00 MHz	10	1,404 kHz

• FM Mute Level

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Adjusting Parts	Instrument Connection
98.00 MHz (30 dB μ V)	98.00 MHz	VR351*1	Input: SO301 Output: Speaker Terminal

Adjust so that an output signal appears.

• Check FM VT

Signal generator: 1 kHz, 40 kHz dev., FM modulated

Frequency	Display	Check Point	Instrument Connection
87.5 MHz	87.5 MHz	2.2 V \pm 0.7 V	TP301
108 MHz	108 MHz	7.3 V \pm 1.0 V	TP301

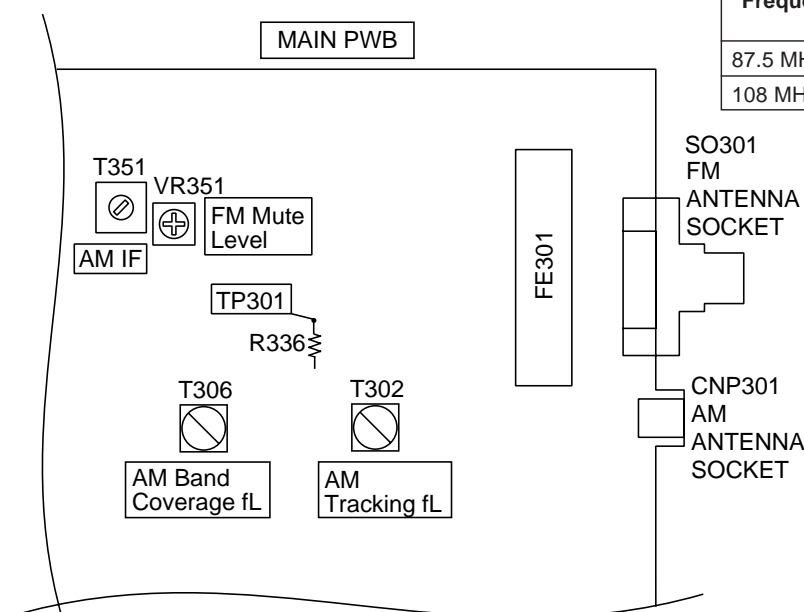


Figure 9-2 ADJUSTMENT POINTS

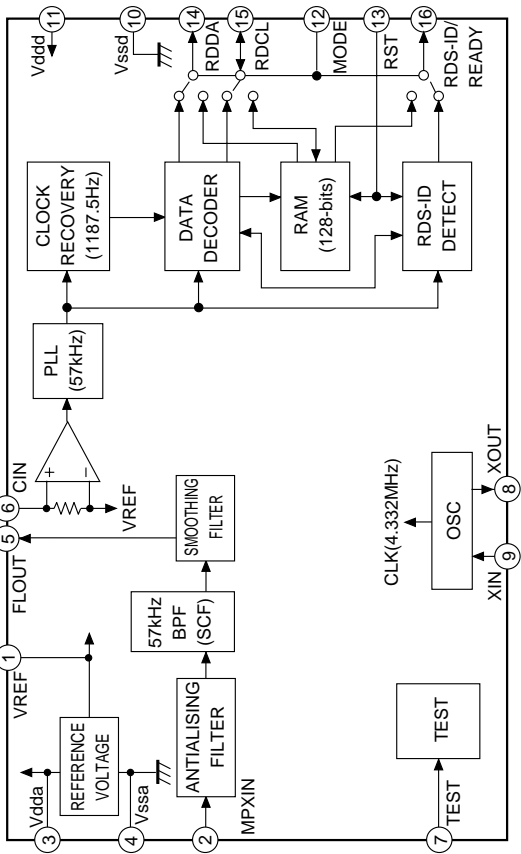
XL-40H/50H

RDS

IC521 VHiLC72723M-1: RDS Circuit (LC72723M)

Pin No.	Port Name	Function
1	VREF	Reference voltage output (Vdda/2).
2	MPXIN	Baseband (multiplexed) signal input.
3	Vdda	Analog power supply (+5V).
4	Vssa	Analog ground.
5	FLOUT	Subcarrier output (filter output).
6	CIN	Subcarrier input (comparator input).
7	TEST	Test input.
8	XOUT	Crystal oscillator output (4.332MHz).
9	XIN	Crystal oscillator input (external reference signal input).
10	Vssd	Digital ground.
11*	Vddd	Digital power supply (+5V).
12	MODE	Read mode setting (0 : master, 1: slave).
13	RST	RDS-ID/RAM reset (positive polarity).
14	RDDA	RDS data output.
15*	RDCL	RDS clock output (master mode)/ RDS clock input (slave mode).
16*	RDS-ID/READY	RDS-ID/READY output (negative polarity).

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.



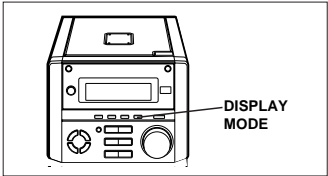
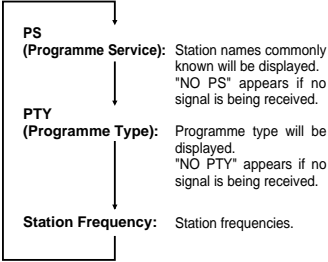
RDS (Radio Data System) OPERATION

RDS is a broadcasting service which a growing number of FM stations are now providing. It allows these FM stations to send additional signals along with their regular programme signals. For example, the stations send their station names, and information about what type of programme they broadcast, such as sports or music, etc. When tuned to an FM station providing the RDS service, RDS will appear, the station frequency (and then the station name if sent) will be displayed. The TP (Traffic Programme) will appear on the display when the received broadcast carries traffic announcements, and the TA (Traffic Announcement) will appear whilst a traffic announcement is being received. EON will appear whilst the EON (Enhanced Other Networks information) data is being broadcast.

Note: When the TP and TA appear at the same time, an announcement is being made. When only the TA appears, an announcement is not being made.

Information Provided by RDS

With the XL-40H/XL-50H, you can display two types of RDS service. To show them in the display, press the DISPLAY MODE button. Each time you press the DISPLAY MODE button, the display will change to show the following information.



Descriptions of the PTY (Programme Type) codes, TP (Traffic Programme) and TA (Traffic Announcement) With the XL-40H/XL-50H, you can search for and receive the following PTY, TP and TA signals.

- NEWS:** Short accounts of facts, events and publicly expressed views, reportage and actuality.
- AFFAIRS:** Topical programme expanding or enlarging upon the news, generally in different presentation style or concept, including debate, or analysis.
- INFO:** Programmes whose purpose is to impart advice in the widest sense.
- SPORT:** Programme concerned with any aspect of sport.
- EDUCATE:** Programme intended primarily to educate, of which the formal element is fundamental.
- DRAMA:** All radio plays and serials.
- CULTURE:** Programmes concerned with any aspect of national or regional culture, including language, theatre, etc.
- SCIENCE:** Programmes about the natural sciences and technology.
- VARIED:** Used for mainly speech-based programmes usually of light-entertainment nature, not covered by other categories. Examples include: quizzes, panel games, personality interviews.
- POP M:** Commercial music, which would generally be considered to be of current popular appeal, often featuring in current or recent record sales charts.
- ROCK M:** Contemporary modern music, usually written and performed by young musicians.
- EASY M:** Current contemporary music considered to be "easy-listening", as opposed to Pop, Rock or Classical, or one of the specialised music styles, Jazz, Folk or Country. Music in this category is often but not always, vocal, and usually of short duration.

(Continued)

- LIGHT M:** Classical Musical for general, rather than specialist appreciation. Examples of music in this category are instrumental music, and vocal or choral works.
- CLASSICS:** Performances of major orchestral works, symphonies, chamber music, etc., and including Grand Opera.
- OTHER M:** Musical styles not fitting into any of the other categories. Particularly used for specialist music of which Rhythm & Blues and Reggae are examples.
- WEATHER:** Weather reports and forecasts and meteorological information.
- FINANCE:** Stock Market reports, commerce, trading, etc.
- CHILDREN:** For programmes targeted at a young audience, primarily for entertainment and interest, rather than where the objective is to educate.
- SOCIAL:** Programmes about people and things that influence them individually or in groups. Includes: sociology, history, geography, psychology and society.
- RELIGION:** Any aspect of beliefs and faiths, involving a God or Gods, the nature of existence and ethics.
- PHONE IN:** Involving members of the public expressing their views either by phone or at a public forum.
- TRAVEL:** Features and programmes concerned with travel to near and far destinations, package tours and travel ideas and opportunities. Not for use for announcements about problems, delays, or road-works affecting immediate travel where TP/TA should be used.
- LEISURE:** Programmes concerned with recreational activities in which the listener might participate. Examples include, Gardening, Fishing, Antique collecting, Cooking, Food & Wine, etc.
- JAZZ:** Polyphonic, syncopated music characterised by improvisation.
- COUNTRY:** Songs which originate from, or continue the musical tradition of the American Southern States. Characterised by a straightforward melody and narrative story line.
- NATION M:** Current Popular Music of the Nation or Region in that country's language, as opposed to international 'Pop' which is usually US or UK inspired and in English.
- OLDIES:** Music from the so-called "golden age" of popular music.
- FOLK M:** Music which has its roots in the musical culture of a particular nation, usually played on acoustic instruments. The narrative or story may be based on historical events or the people.
- DOCUMENT:** Programme concerned with factual matters, presented in an investigative style.
- TEST:** Broadcast when testing emergency broadcast equipment or receivers.
- ALARM:** Emergency announcement made under exceptional circumstances to give warning of events causing danger of a general nature.
- NONE:** No programme type (receive only).
- TP:** Broadcasts which carry traffic announcements.
- TA:** Traffic announcements are being broadcast at present.

Note: When the unit is in the EON stand-by mode and a programme is selected, the unit will display "TI" instead of "TP" or "TA".

TEST MODE

The test mode applied to this microcomputer has three modes, namely ordinary test mode to be used for adjustment or measurement, aging test mode to be used for aging test, and self-diagnosis test mode for self-inspection in case of final product inspection.

The test mode specification prescribes the microcomputer with RDS (RH-IX0026SJZZ) . There are two types of indication examples; large ones for the microcomputer with RDS, and smaller ones for the microcomputer without RDS.

1. Turning on the test mode

To turn on the specific test mode, press the POWER button, holding down the following two buttons in the ordinary stand-by mode (power off state). In this case only the main unit button is valid. Even when the POWER of remote control button is set to on, the test mode is not turned on.

[Ordinary test mode]

1. CD Test Mode (TEST 1)..... Volume/JOG Dial Selector + FF/FWD
2. Tuner Test Mode (TEST 2)..... Volume/JOG Dial Selector + Volume Select
3. Electronic volume Test Mode (TEST 3)..... REW/REV + FF/FWD
4. Timer Test Mode (TEST 4)..... FUNCTION + Volume Select
5. LCD Test Mode (TEST 5)..... FUNCTION + FF/FWD

[Self-diagnosis Test Mode]

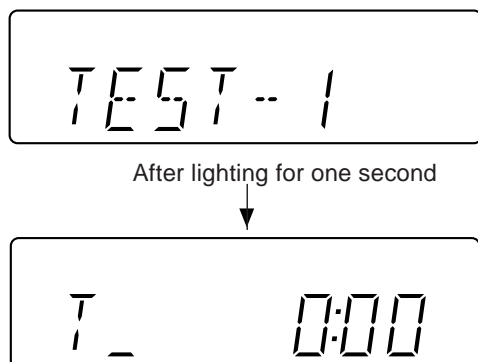
1. Button input diagnosis test mode (TEST6).... REW/REV + Volume Select

2. CD Test Mode (TEST 1)

In the CD test mode the operation of each step is enabled even when the LID-SW is off. However, if focus cannot be set in step 3 or any error processing is started, it is impossible to proceed to the next step. When the error processing is started, operations other than termination of test mode by pressing the POWER button or return to the step 1 by pressing the STOP button are inhibited.

1. Step 1 Mode

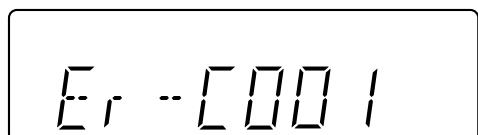
When the CD test mode is turned on, the following indication lights, the processing (until turning-off of CD STB terminal of CD initialization operation flow) is executed, and the next button input is waited.



If the following operation buttons are pressed in this state, the operation is performed as follows.

- "POWER" The test mode is turned off, the power is turned off, and the ordinary standby mode is set.
- "FF/FWD" After the pickup returns once to the innermost periphery, it slides toward the outer periphery while this button is held down.
- "REW/REV" After the pickup returns once to the innermost periphery, it slides toward the inner periphery while this button is pressed. However, if PU-IN is on, input is invalid.
- "PLAY" Shift to step 2
- "STOP" Invalid
- "REC PAUSE" Shift to step 5

* In case of initialization the pickup is moved toward the inner periphery. Any buttons other than "POWER" button are not accepted until the shift of pickup to the inner periphery is completed at this time. If PU-IN SW ON cannot be detected within 10 seconds, the slide motor is stopped, and the following error indication appears. Press the POWER button to end the test mode, or press the STOP button to return to step 1. Any other operations are inhibited.



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2. Step 2 Mode

When the "PLAY" button is pressed in this mode, the laser lighting command LDON (8400) is sent, and the laser is turned on. Other operations are not performed.



If the following buttons are pressed in this state, the operation is performed as follows.

"POWER" The test mode is turned off, the power is turned off, and the ordinary standby mode is set.

"FF/FWD" The pickup slides toward the outer periphery while this button is held down.

"REW/REV" The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.

"PLAY" Shift to step 3

"STOP" Return to step 1

"REC PAUSE" Shift to step 5

3. Step 3 Mode

The laser is kept lighting. The processing (until turning-on of CLV servo of CD initialization operation flow) is executed, and the next button input is waited. (The focus servo is turned on, and focus search is performed.)

The focus search is repeated until the focus is set.



When the following operation buttons are pressed in this state, the operation is executed as follows.

"POWER" The test mode is turned off, the power is turned off, and the ordinary standby mode is set.

"FF/FWD" The pickup slides toward the outer periphery while this button is held down.

"REW/REV" The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.

"PLAY" If the focus has been set, shift to step 4 is executed. If the focus has not been set, acceptance is inhibited.

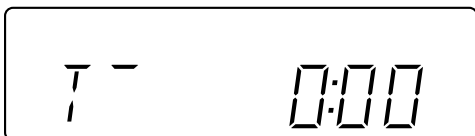
"STOP" Return to step 1

"REC PAUSE" Shift to step 5

*If the focus is disturbed after it has been set, the process returns to step 1.

4. Step 4 Mode

The CLV servo ON command (8600) sending operation is performed, and the next button input is waited. (The disc is rotated to perform CLV locking.)



The time display indicates always "0:00".

When the following buttons are pressed in this state, the operation is executed as follows.

"POWER" The test mode is turned off, the power is turned off, and the ordinary standby mode is set.

"FF/FWD" The pickup slides toward the outer periphery while this button is held down.

"REW/REV" The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.

"PLAY" Shift to step 5

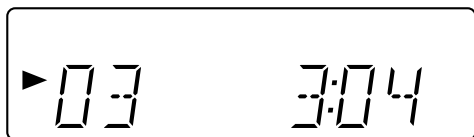
"STOP" Return to step 1

"REC PAUSE" Shift to step 5

*If the focus is disturbed, the process returns to step 1.

5. Step 5 Mode

The CD initialization operation flow is executed to the end, the mute is set to off, and playback is started. Even when the playback reaches the outermost periphery of disc, the operation does not stop. The LCD display indicates the playback past time as in case of ordinary CD playback.



When the following operation buttons are pressed in this state, the operation is executed as follows.

"POWER" The test mode is turned off, the power is turned off, and the ordinary standby mode is set.

"FF/FWD" The pickup slides toward the outer periphery while this button is held down.

"REW/REV" The pickup slides toward the inner periphery while this button is held down. However, if PU-IN is on, input is invalid.

"PLAY" Invalid

"STOP" Return to step 1

"FUNCTION" Shift to step 6

"BAND" Shift to step 7

*If the focus is disturbed, the process returns to step 1.

Other cautions

- TOC IL is not executed in the test mode.
- As for button operations other than those shown above, only the sound volume operation (with JOG) is accepted.

3. Tuner Test Mode (TEST 2)

1. Outline of tuner (radio) test mode

The tuner test mode is intended to store the adjustment and measurement frequencies in the preset memory CH without frequency setting by adjusting personnel when the tuner section is adjusted in the production line.

2. Details of tuner test mode

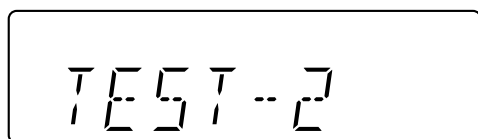
When the power is turned on by using the "POWER" button while the "Volume/JOG Dial Selector" and "Volume Select" buttons are held down in POWER OFF state, the frequency for adjustment and measurement of destination specified by the AREA terminal is preset and stored in the preset memory CH. However, Ordinary 1 and Ordinary 2 are set to the designation (destination selected by SPAN switching operation) set when the test mode is set. (As for frequencies to be preset and stored for each destination, refer to item 3.)

The tuner test mode is started from preset No.1.

The operations of test mode are identical with the ordinary operations of TUNER function. However, FUNCTION switching is invalid.

Since it is necessary to discard the content of preset memory when the tuner test mode is ended, "0000" or "1111" bits are written in the memory to be checked in case of memory check (in case of initial setting) so that memory abnormality is detected in case of initial setting so as to ensure memory initialization.

When the tuner test mode is turned on, the following indication lights for one second.



- The TUNER TEST2 mode is set as a result of Volume Select + POWER. -> IF AC is set to OFF in the TEST2 mode, the initial state is restored.



When POWER is set to OFF, the memory of TEST2 mode is protected.

When the power is turned on again, the ordinary operation is enabled while the data is stored in the memory (besides TUNER).



If AC OFF state is maintained in this state for about 1/2 day, start is executed in the initial state.

- To clear the whole memory, insert the AC cord, holding down MEMORY + PLAY.

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3. Preset frequencies for various destinations (random preset memory)

CH	BAND	Europe 2, 4
1	FM STEREO	FM 87.50 MHz
2		FM108.00 MHz
3		FM 98.00 MHz
4		FM 90.00 MHz
5		FM106.00 MHz

CH	BAND	Europe 2, 4
6	AM	AM 522 kHz
7		AM1620 kHz
8		AM 990 kHz
9		AM 603 kHz
10		AM1404 kHz
11-15	LW	

CH	BAND	Europe 2, 4
16-25		
26	FM MONO	FM106.00 MHz
27		FM 90.00 MHz
28		FM 98.00 MHz
29		FM108.00 MHz
30		FM 87.50 MHz

- The hatched sections of the table are not stored in memory.

4. ASPM TEST Mode

When the ASPM button is pressed, the test mode is set. It starts up at FM 106.50 MHz. (ST mode)

Data of 27 CH of 04 to 30 CH are all stored at FM 87.50 MHz (ST).

01 to 03CH are kept empty (If data of 3 CH are stored, max. 30 CH is filled.)

When the ASPM button is operated in the TEST mode 3, the preset data is cleared (overwrite).

A) Operation with ASPM button

Press the "ASPM" button or hold it down. (Any button other than ASPM button cancels the ASPM test mode.)

FM 105.00 MHz (ST) is indicated, and scan is started.
(Start from 105.00 MHz)

During scanning the frequency is indicated.

End at FM 108.00 MHz (ST)

Only the number of preset and stored stations (number of CHs: max. 3 stations) is indicated for one second in the ASPM test mode. When two stations are stored, "_2 MEMORY" is indicated (lighted) for one second. ("02 MEMORY" indication is not given.)

"END" is not indicated

In case of "_0 MEMORY" the process ends, and the FM 106.50 MHz (ST) state is resumed.

Not in zero-memory state

(An example)

FM P-01

01CH indication (for one second)

Frequency indication (for one second)

FM 105.50MHz(ST)

02CH indication (for one second)

FM P-02

Frequency indication (for one second)

FM 106.50MHz(ST)

03CH indication (for one second)

FM P-03

Frequency indication (for one second)

FM 107.50MHz(ST)

Confirmation of content of memory
(Examples of concrete indication)

After indication of continuous time series for one second the indication of FM 106.50 MHz (ST) is restored.

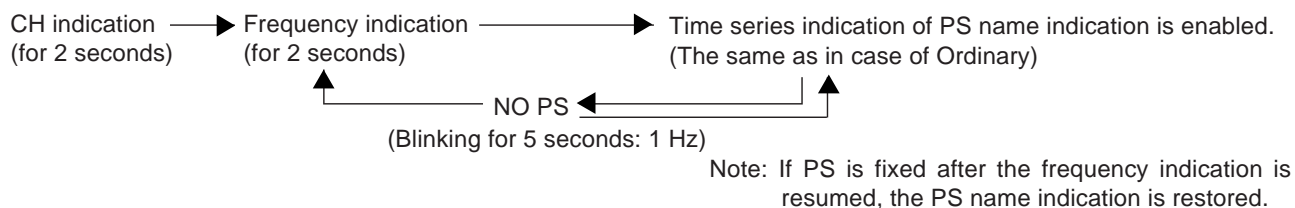
(The preset button is not pressed. The time series is indicated automatically, and the content of memory is indicated.)

* PS name is not indicated (while the content of memory is checked)

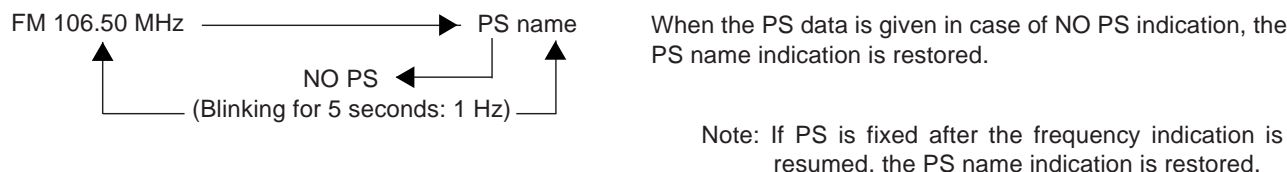
* If only 1 CH data is stored, FM P-01 -> FM 106.00 MHz -> FM 106.50 MHz (ST)

(An example) (1 sec) (1 sec) (ST) End indication

* When the "PRESET UP" button or "PRESET DOWN" button is pressed after completion, the following indication appears.



* If signal exists at 106.50 MHz, the following indication appears.



In case of memory storage with ASPM, for example, if RDS station 107.50 MHz has the PI code (the same as that of RDS station 105.50 MHz) and VSM is greater than 105.50 MHz (PR-01), data is overwritten on 105.5 MHz which is contained in "PR-01". (Frequency is changed to 107.50 MHz.)

If VSM is equal, previously stored 105.50 MHz remains.

When RDS station is stored in the test mode, the 2-second blinking of preset No. is not performed so as to save the production line test time. ("RDS" lighting is performed.)

Note: RDS operation is performed in FM MONO state. However, in case of ASPM, ASPM scan is performed after BAND is changed from FM MONO to FM STEREO.

Note: When the ►■ (PLAY) button is pressed in TEST 2 mode, it is possible to check the state of IF count. However, this function is for designer. It is not necessary for other sections.

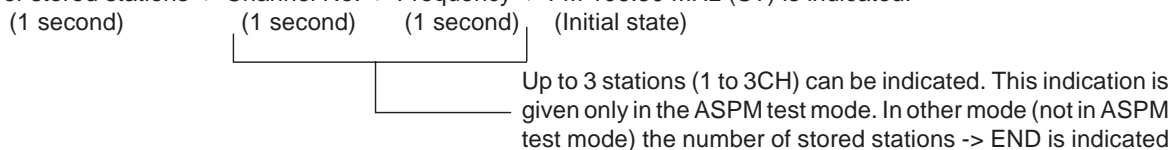
B) Cautions concerning the ASPM test mode

a) Cancel: When the "ASPM" button is pressed again during operation after it was first pressed in the test mode, the ASPM test mode is canceled (interrupted), and the initial state FM 106.50 MHz (ST) indication is restored. (To check the data which was preset and stored until interruption, use the preset UP/DOWN button. (JOG UP/DOWN is also available after JOG mode button operation.) wing indication appears.

b) The ASPM test mode is started in FM stereo state (FM 106.50 MHz ST). If any button other than ASPM button is pressed even only once after it is started, it becomes invalid, and the ASPM test mode becomes inoperable. Invalid: The Ordinary mode is set while 4 to 30CH data remain in memory (or 1 to 30 CH MAX data remain in memory).

The "ASPM" button can be repeatedly operated until 01CH to 03CH is filled (up to 3 stations in memory).

The number of stored stations -> Channel No. -> Frequency -> FM 106.50 MHz (ST) is indicated.



c) Broadcast (without PI code) which is not RDS is not preset and stored in memory.

When the ASPM mode is set, the "MEMORY/SET" button cannot be operated (the test mode is canceled). Operation is possible after ASPM test mode operation.

d) Scan frequency: 105.00 MHz -> 108.00 MHz

Data are stored in memory so that the PI code is not duplicated (by seeing the PI code and VSM (S meter value). When the PI code is duplicated, both VSM (S meter value) are compared. The greater one is stored in memory but the smaller one is discarded.

For the stations having the same PI code, only one station having the highest electric field intensity is stored, and the memory is refilled. The channels which can be preset in the ASPM test mode are 01 to 03CH. If 3 stations are stored, 30 CH are filled.

For the stations having the same electric field intensity, the former (preceding station) is stored.

e) Signal of already stored same frequency is not stored. (The previously stored data is kept.)

f) The order of preset memory is 01CH -> 02CH -> 03CH.

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- g) When 01 to 03CH were all used, scan is aborted at the frequency at which filling occurred, and the following indication appears.

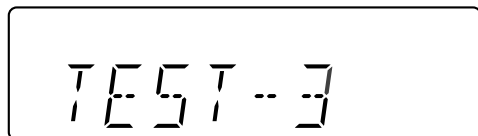
Number of stored stations -> Indication of stored channel -> Indication of frequency -> Return to initial FM 106.50 MHz (ST)
(1 second) (1 second) (1 second)

In this period up to 3 stations are continuously indicated (1 to 3 CH).

- h) If even one station could not be preset and stored in the APMS mode, "_0MEMORY" is indicated after scanning, and then FM 106.50 MHz (ST) indication is restored. (The first digit is space.)
("_0MEMORY" is indicated in the test mode.)
- i) When the "ASPM" button is pressed after three stations are stored (after full-memory of 30 stations), "ASPM" blinks for 2 seconds, and then FM 106.50 MHz (ST) indication is restored without ASPM scanning. (RDS automatic lighting)
(In case of ASPM button operation in full memory state)
- j) After completion of specific operation FM 106.50 MHz (ST) indication is restored.
- k) Test mode
Use of only the function button is inhibited.
- l) The first channel to be called (when data is stored in the ASPM mode) is 01CH.
- m) After start-up in the ASPM test mode the ASPM key is valid even when it is pressed many times. The test mode is kept.
If three stations are stored (1 to 3CH), full-memory state occurs.
If the ASPM button is pressed after occurrence of full-memory state, the same operation as that described in item i) is performed.

4. Electronic volume Test Mode (TEST 3)

When the test mode is set, the following indication lights for one second.

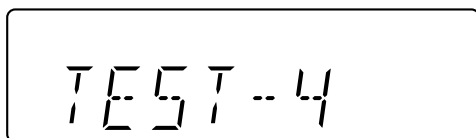


When this mode is set, BASS/TREBLE is set to 0 (0 dB) and SURROUND mode is set to off, and start-up function is set to CD when volume is -14 dB (STEP 17). The button operations in the test mode are the same as those of ordinary operation excepting sound volume UP/DOWN.

- (1) The indication is the same as that of ordinary operation excepting test mode setting.
- (2) The sound volume control with the sound volume UP/DOWN button is only the following 3 steps unlike the ordinary state.
Volume- ∞ (STEP 0) <-> Volume-14 dB (STEP 23) <-> Volume-0 (STEP 30)
- (3) BASS/TREBLE and SURROUND are switched when button operation is performed.

5. Timer test Mode (TEST 4)

When the test mode is set, the following indication lights for one second.

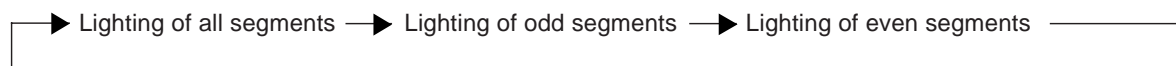


The current time and timer time are set in the following procedure to perform the timer playback.

1. Set the current time to 1:00, set the timer to ON time 1:02, set the function to Tape, and set volume STEP 8. One minute is counted as one second, and the timer playback operation is performed. The fade-in (when playback is started) is executed at a rate of one step for 0.5 sec. After completion of fade-in the fade-out is executed at a rate of one step for 0.5 sec (WAIT 1 sec inserted). After completion of fade-out the power is turned off (after WAIT 1 sec), and the mode is changed to the standby mode. The indication during operation is the same as that of ordinary timer operation.

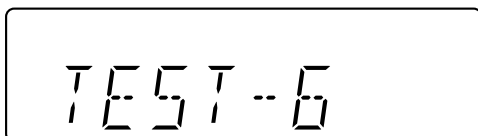
6. LCD Test Mode (TEST 5)

When the LCD test mode is set, all the LCD segments are lighted. After that the indication is changed as follows according to the "PLAY" button input.



7. Key input diagnosis Test Mode (TEST 6)

When the test mode is set, the following indication appears.



This test mode is intended to check whether all the main unit buttons can be detected. Accordingly, in this test mode checking as to whether the "POWER" button was pressed after all the buttons shown below were pressed is performed. If the result is OK, OK is indicated. Even any one of keys was not pressed, an error is indicated. In case of OK termination or error termination exit from this mode occurs when the "POWER" button is pressed next time, and the standby mode is set.

1. In case of XL-40H/50H

The following 15 buttons are detected as all buttons.

PLAY, JOG MODE, BAND, BASS/TREBLE, FUNCTION, MEMORY/SET, REC PAUSE, REW, FF, STOP, CLOCK/TIMER/
SLEEP,PTY-TI, EON, APMS, DISPLAY



The OK/NG indication of test result is as follows.



NOTES ON SCHEMATIC DIAGRAM

- Resistor:
To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
(CH), (TH), (RH), (UJ): Temperature compensation
(ML): Mylar type
(P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.

REF. NO	DESCRIPTION	POSITION
NSW801	PICKUP IN	ON—OFF
SW700	JOG	ON—OFF
SW709	ON/STAND-BY	ON—OFF
SW710	CLOCK/TIMER/SLEEP	ON—OFF
SW711	TUNING UP	ON—OFF
SW712	PLAY/CD PAUSE	ON—OFF
SW713	VOLUME SELECT	ON—OFF
SW714	DISPLAY MODE	ON—OFF
SW715	ASPM	ON—OFF
SW716	EON	ON—OFF
SW717	PTY. TI	ON—OFF

- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
 1. In the tuner section,
 - () indicates AM
 - < > indicates FM stereo
 2. In the main section, a tape is being played back.
 3. In the deck section, a tape is being played back.
 - () indicates the record state.
 4. In the power section, a tape is being played back.
 5. In the CD section, the CD is stopped.
- Parts marked with “” () are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

REF. NO	DESCRIPTION	POSITION
SW721	MEMORY/SET	ON—OFF
SW722	BASS/TREBLE	ON—OFF
SW723	BAND	ON—OFF
SW724	REC. PAUSE	ON—OFF
SW725	STOP/CLEAR	ON—OFF
SW726	TUNING DOWN	ON—OFF
SW727	FUNCTION	ON—OFF
SW728	VOLUME JOG	ON—OFF
SW801	OPEN/CLOSE	ON—OFF
SW901	FOOL PROOF	ON—OFF
SW902	CAM	ON—OFF

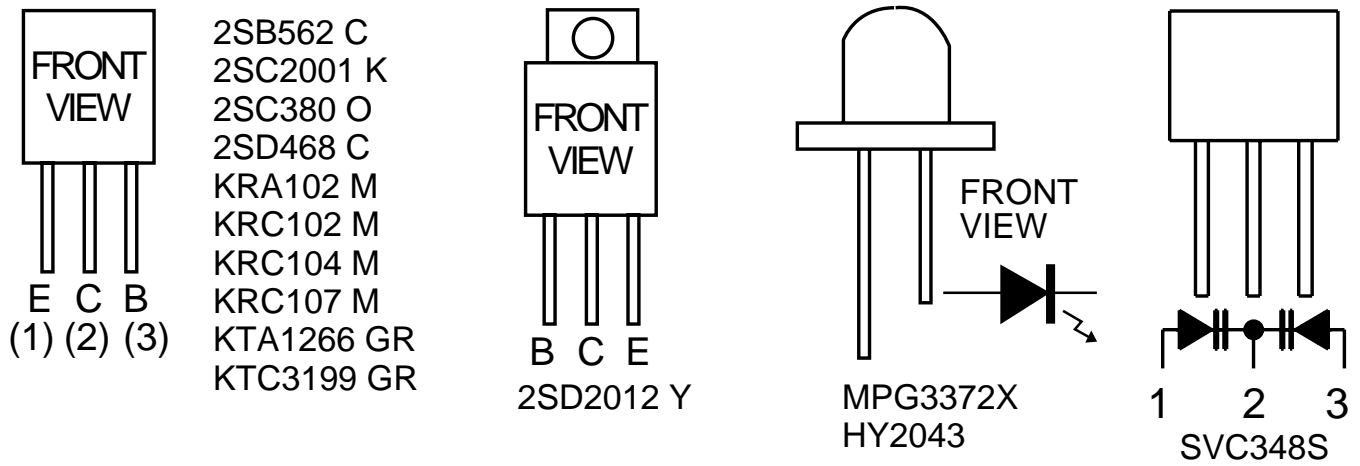
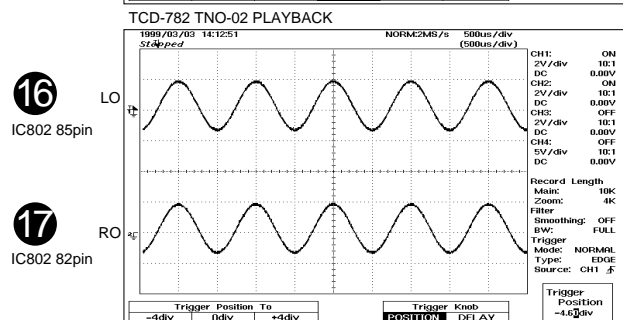
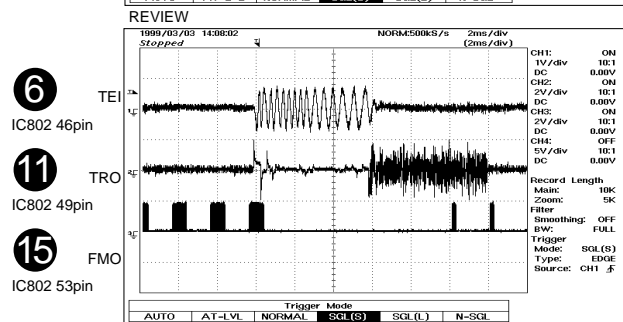
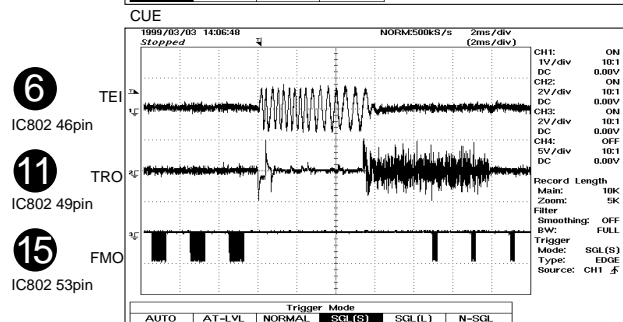
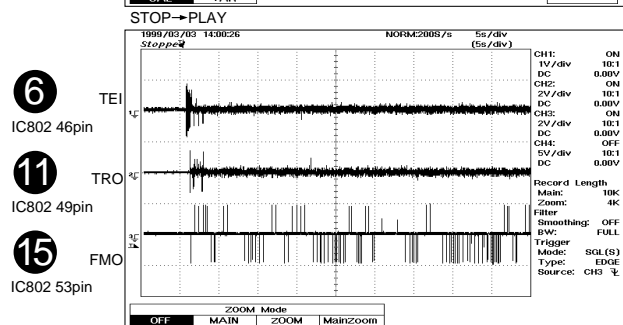
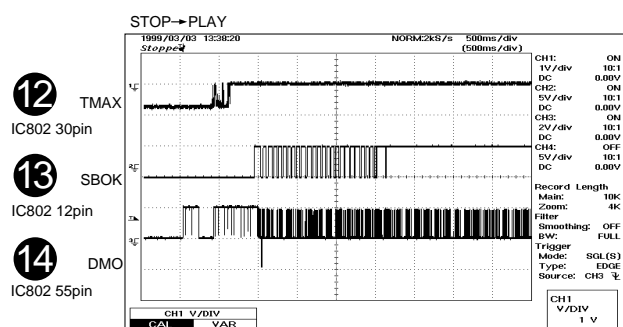
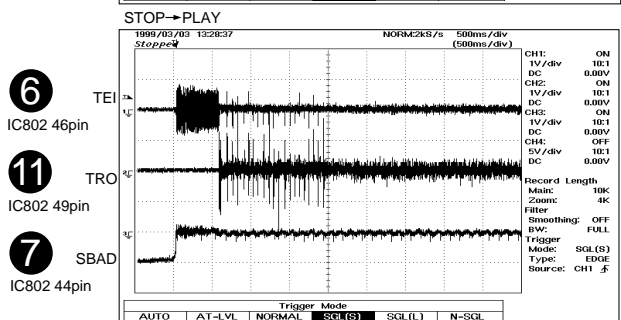
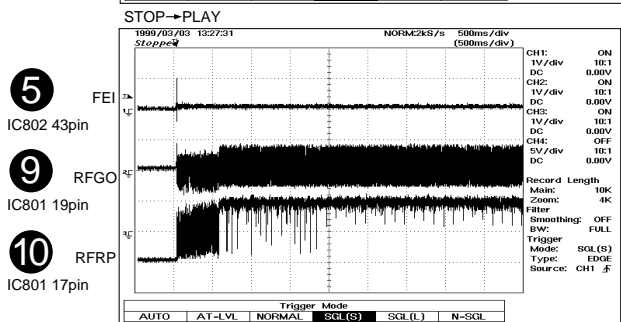
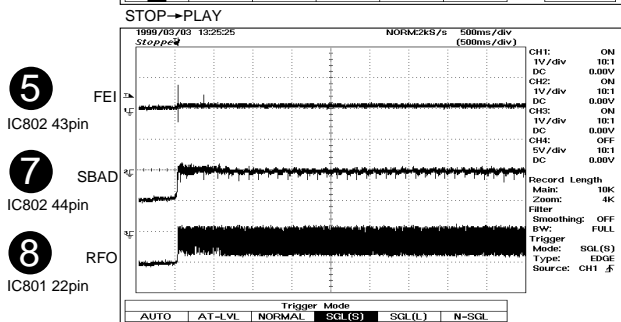
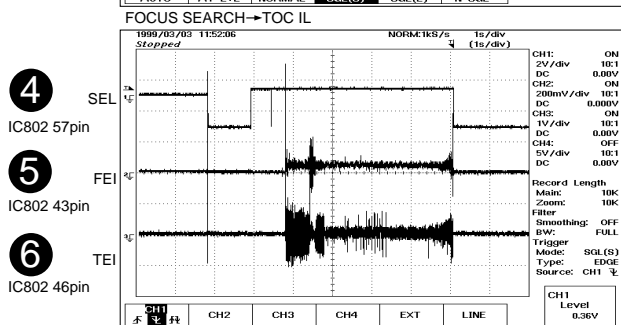
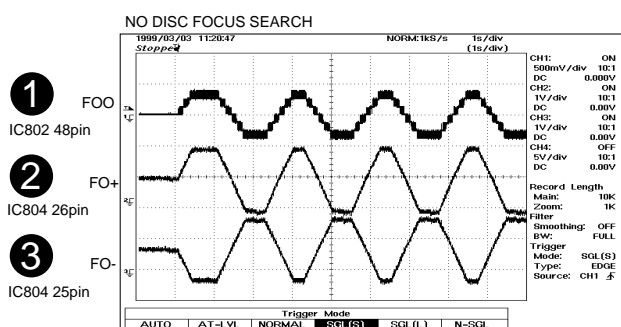


Figure 18 TYPES OF TRANSISTOR AND LED

WAVEFORMS OF CD CIRCUIT



XL-40H/50H

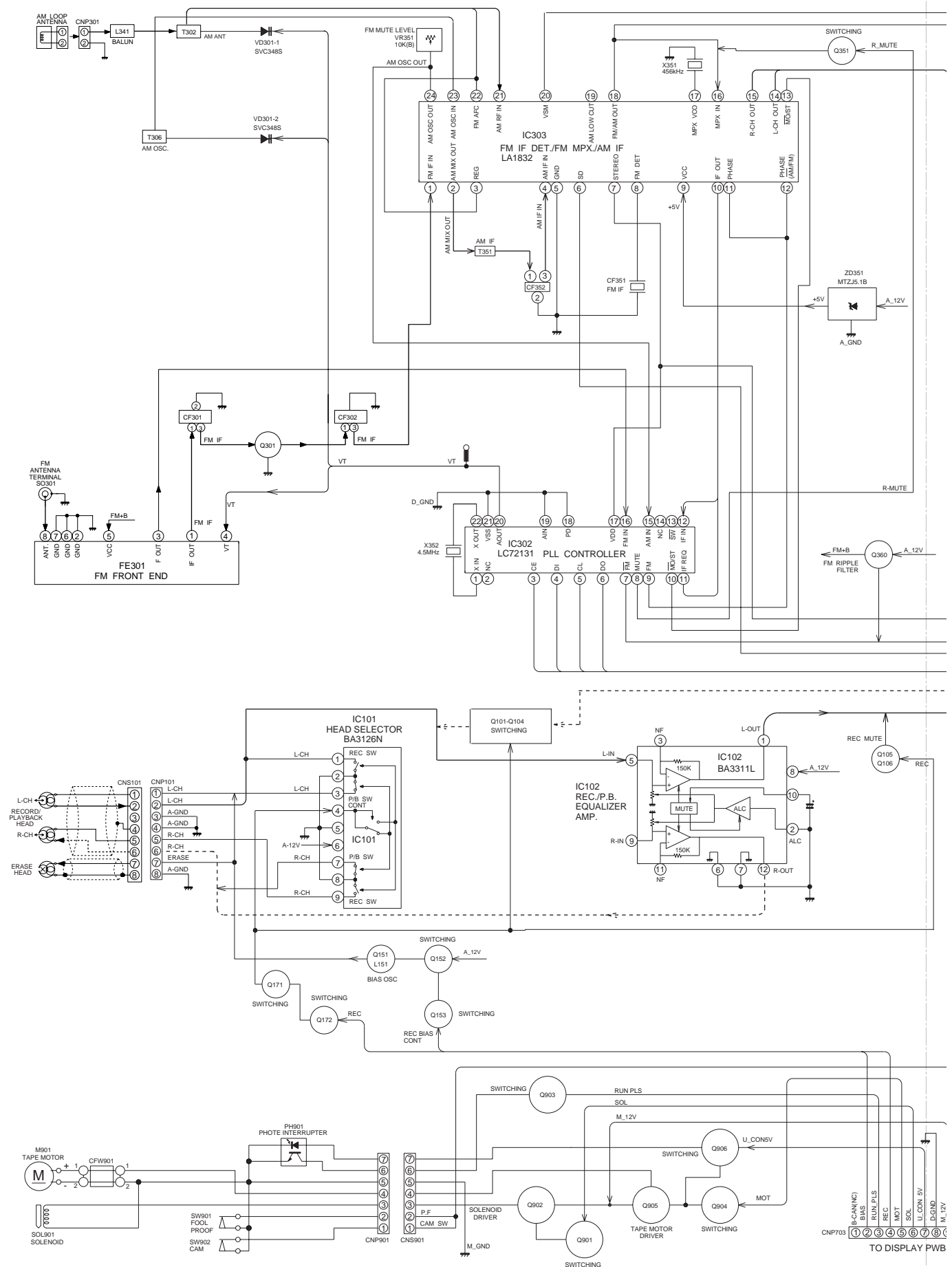


Figure 20 BLOCK DIAGRAM (1/4)

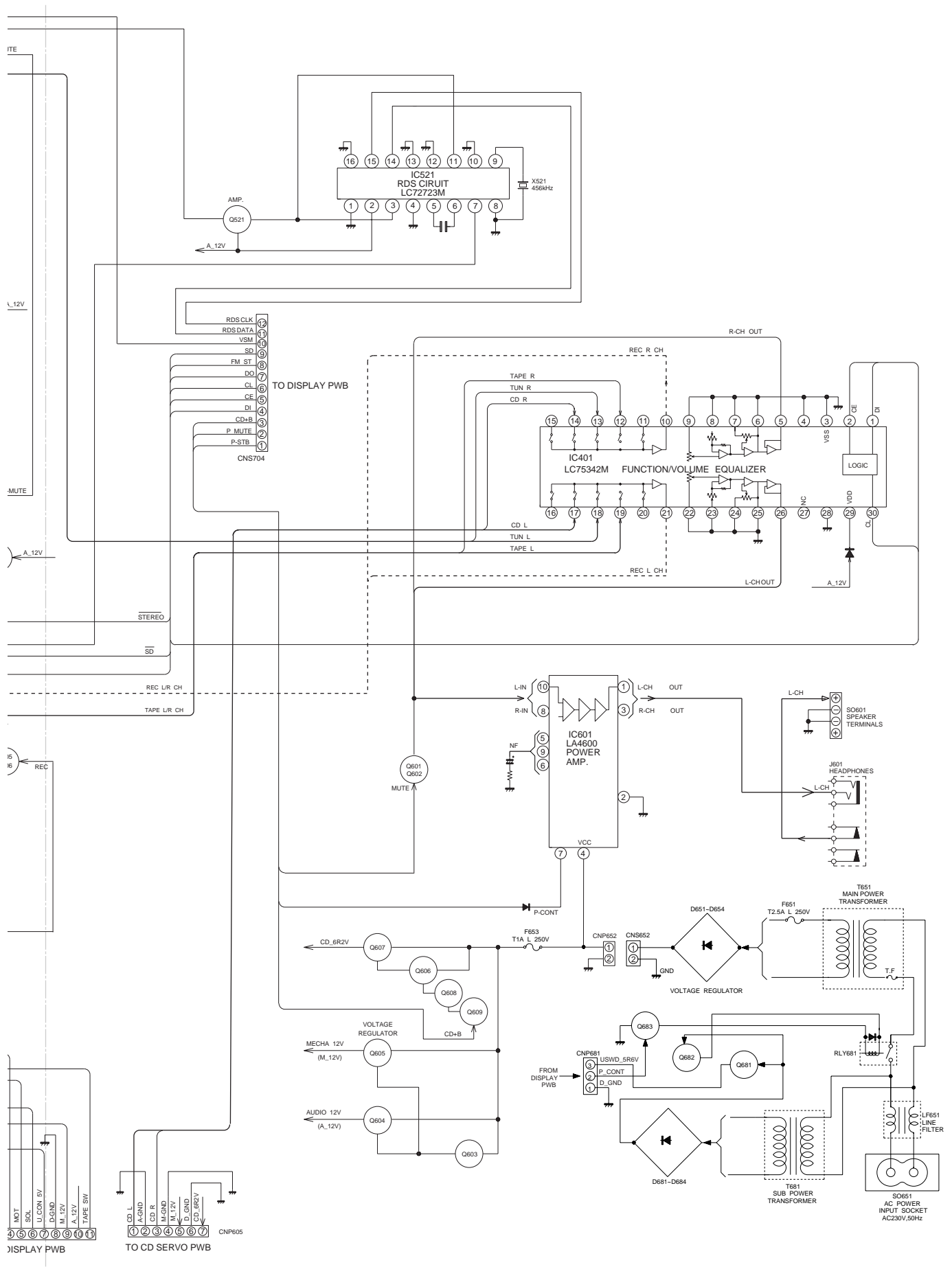


Figure 21 BLOCK DIAGRAM (2/4)

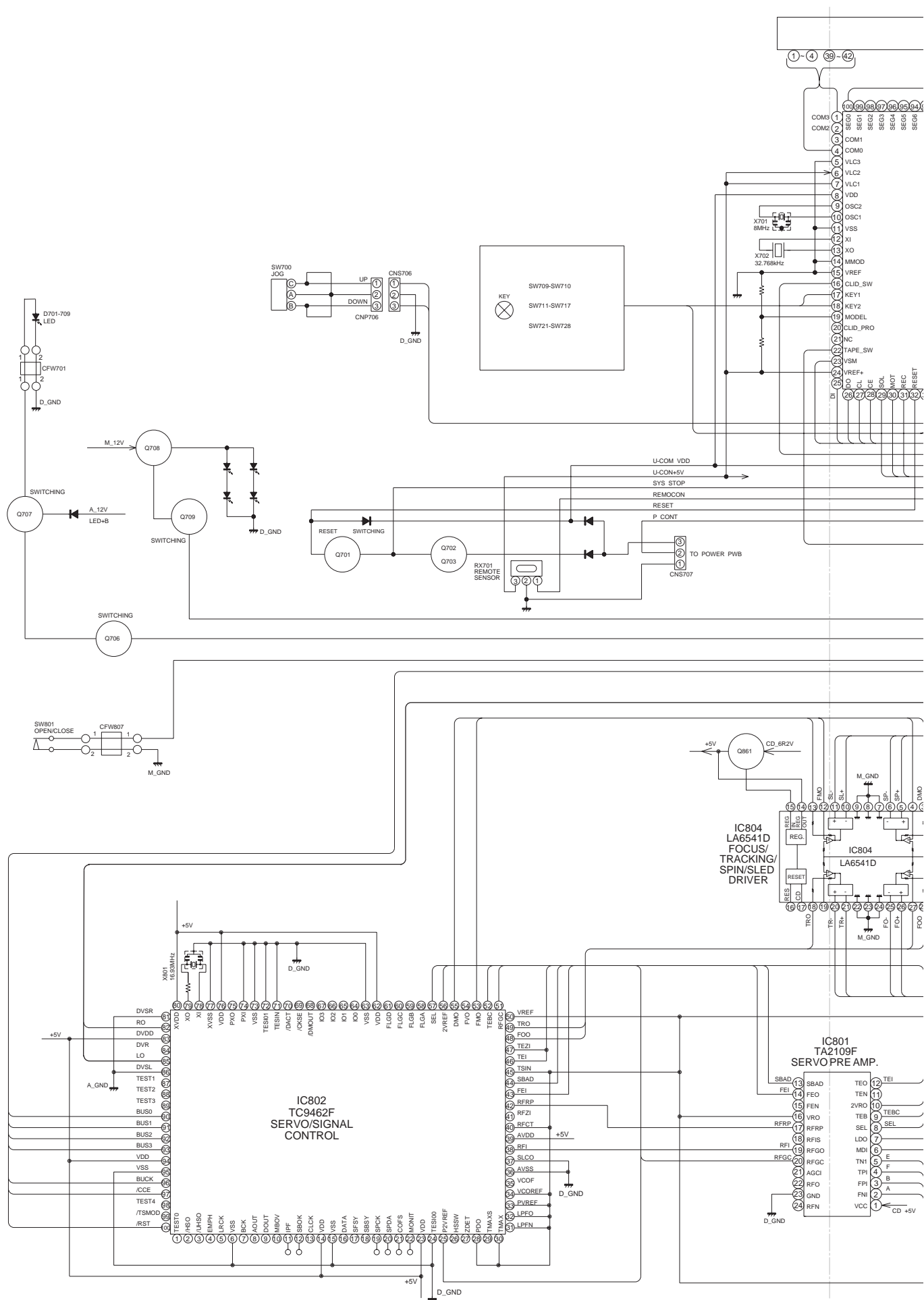


Figure 22 BLOCK DIAGRAM (3/4)

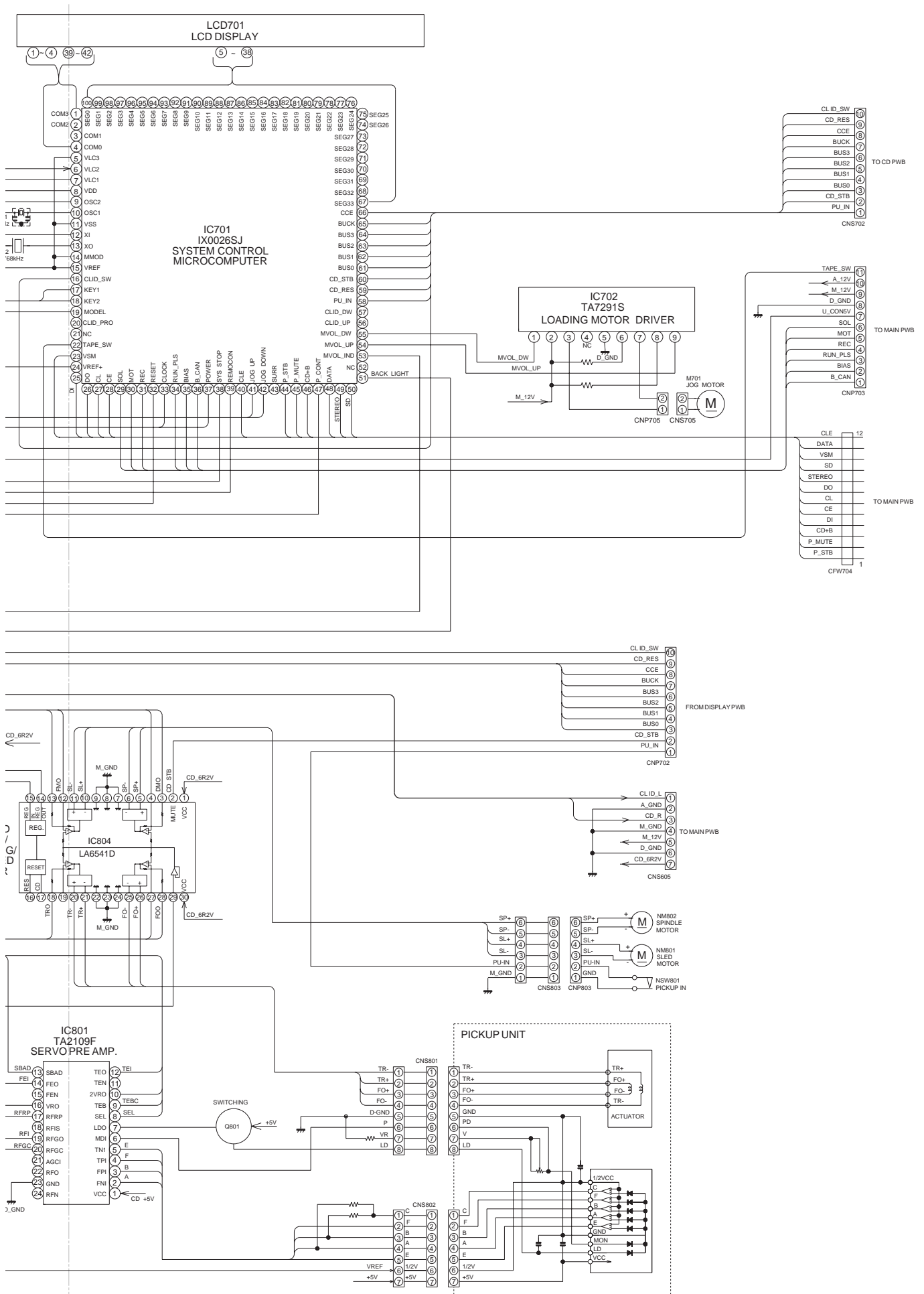


Figure 23 BLOCK DIAGRAM (4/4)

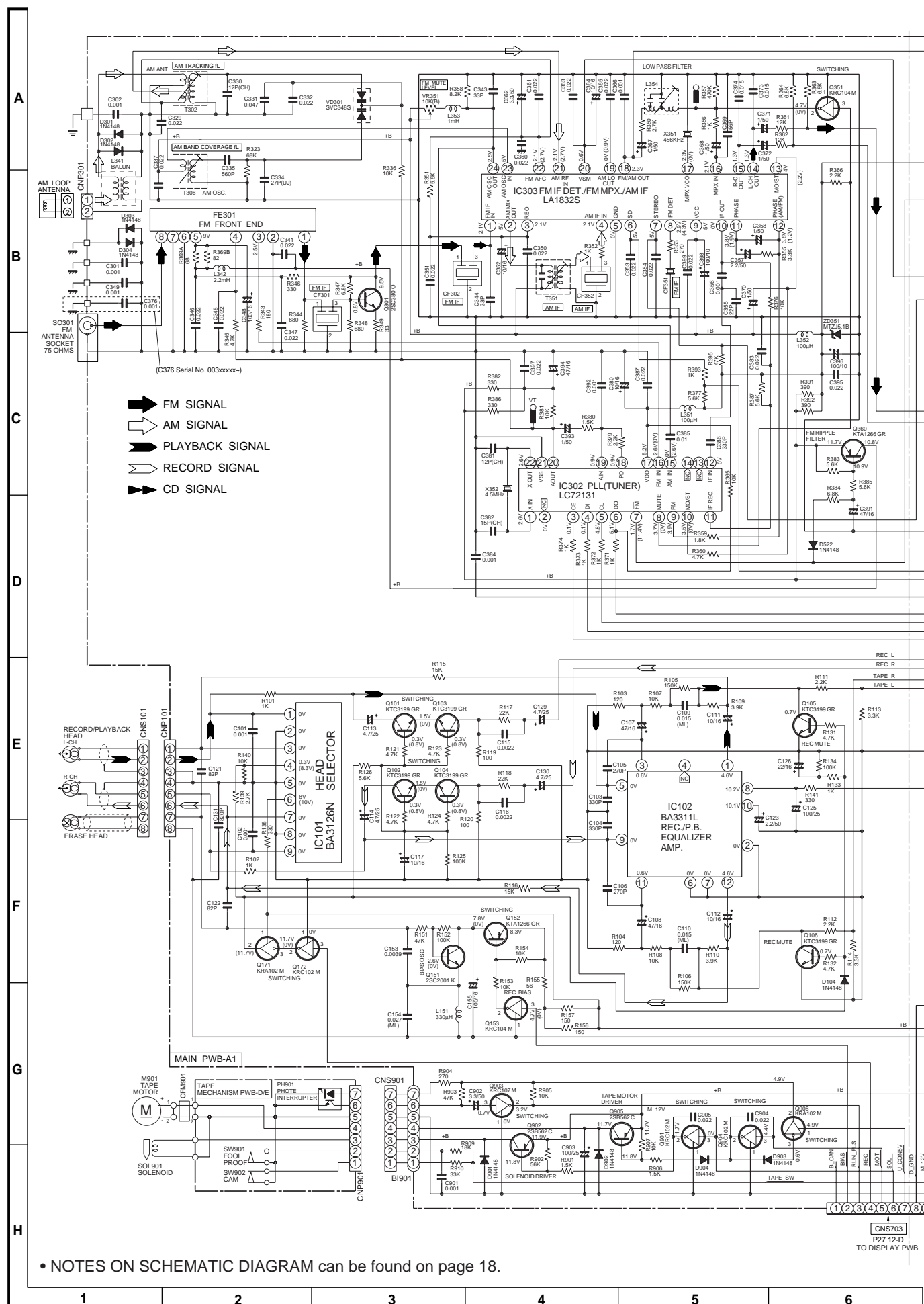


Figure 24 SCHEMATIC DIAGRAM (1/6)

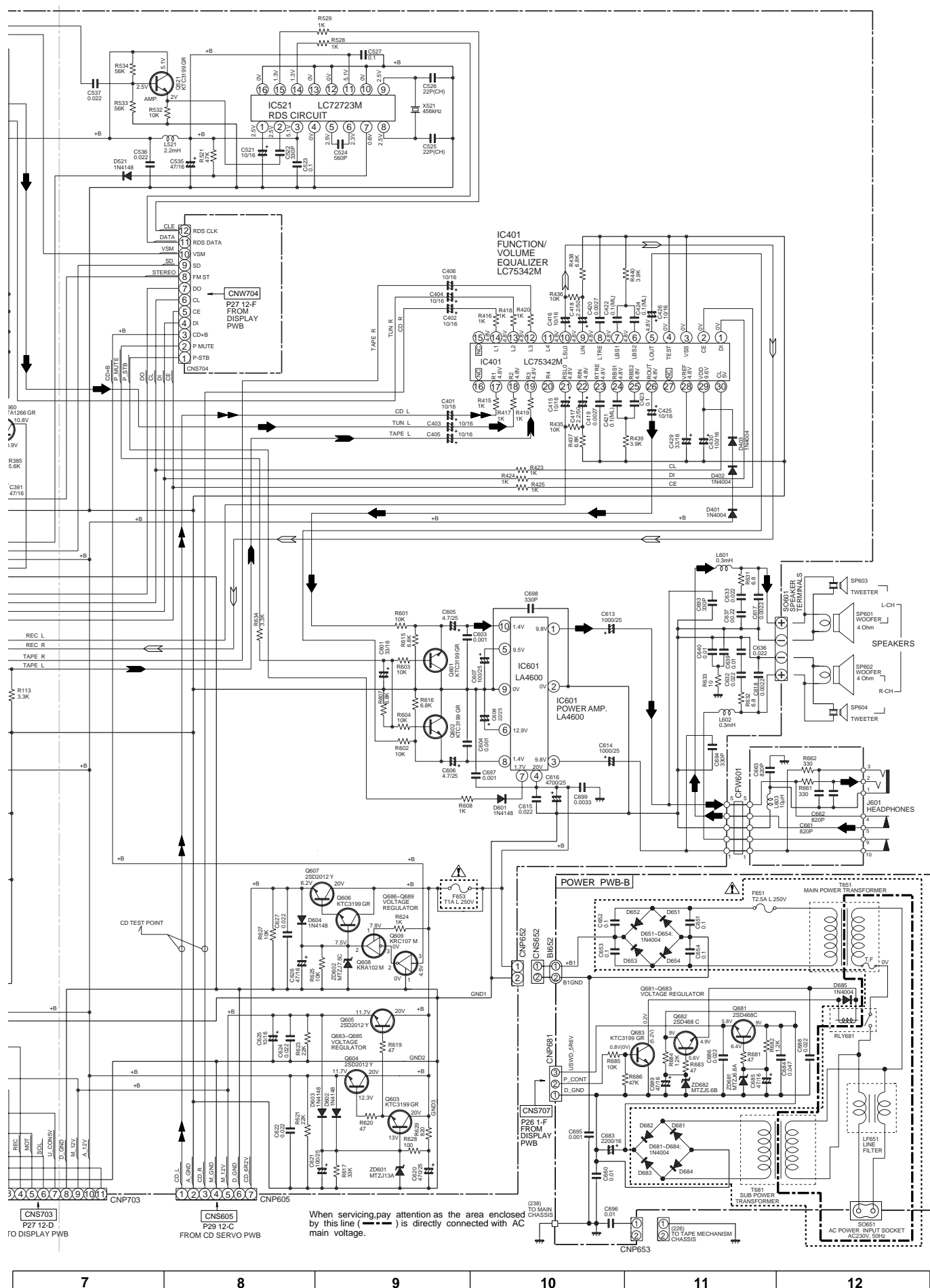
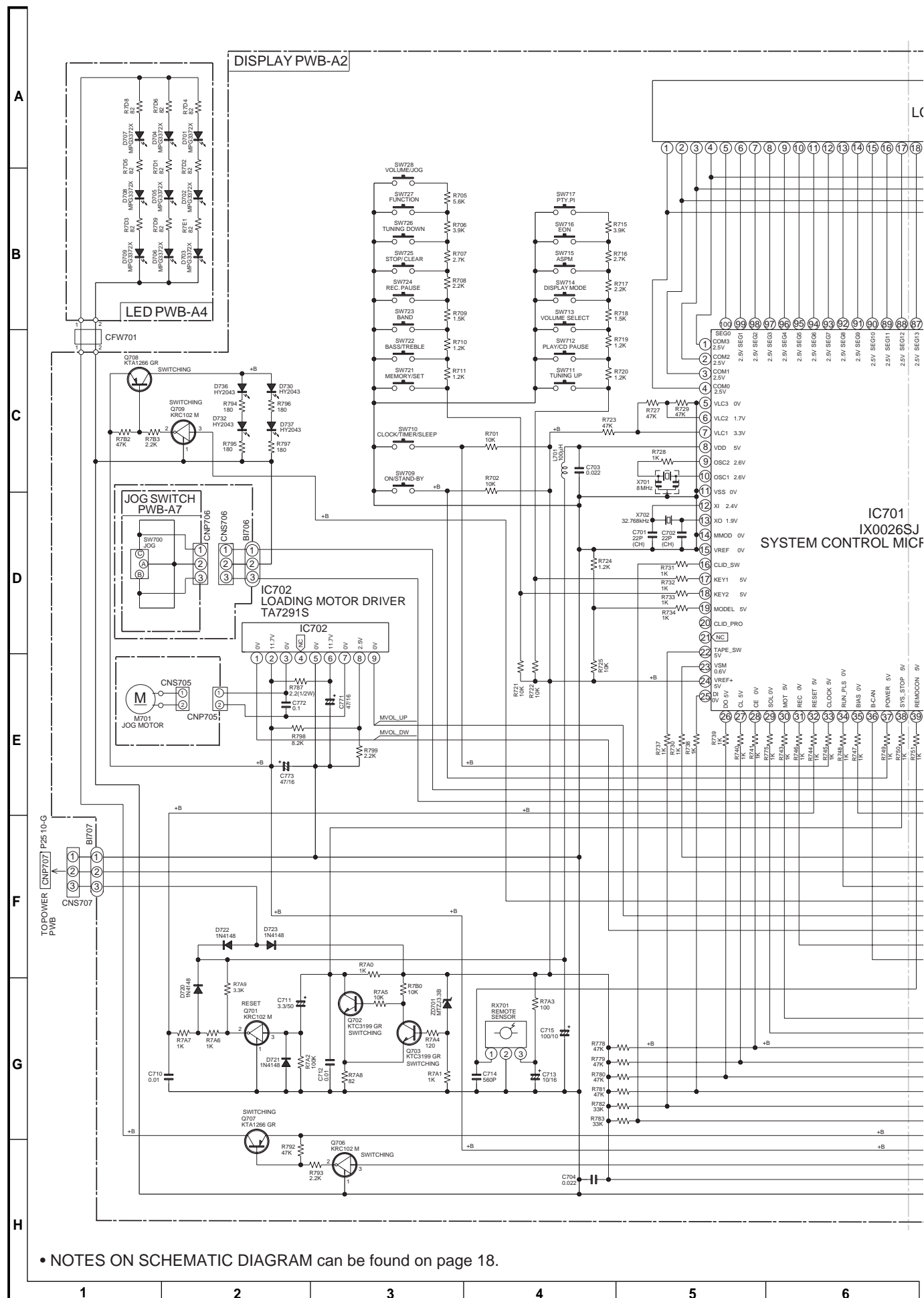
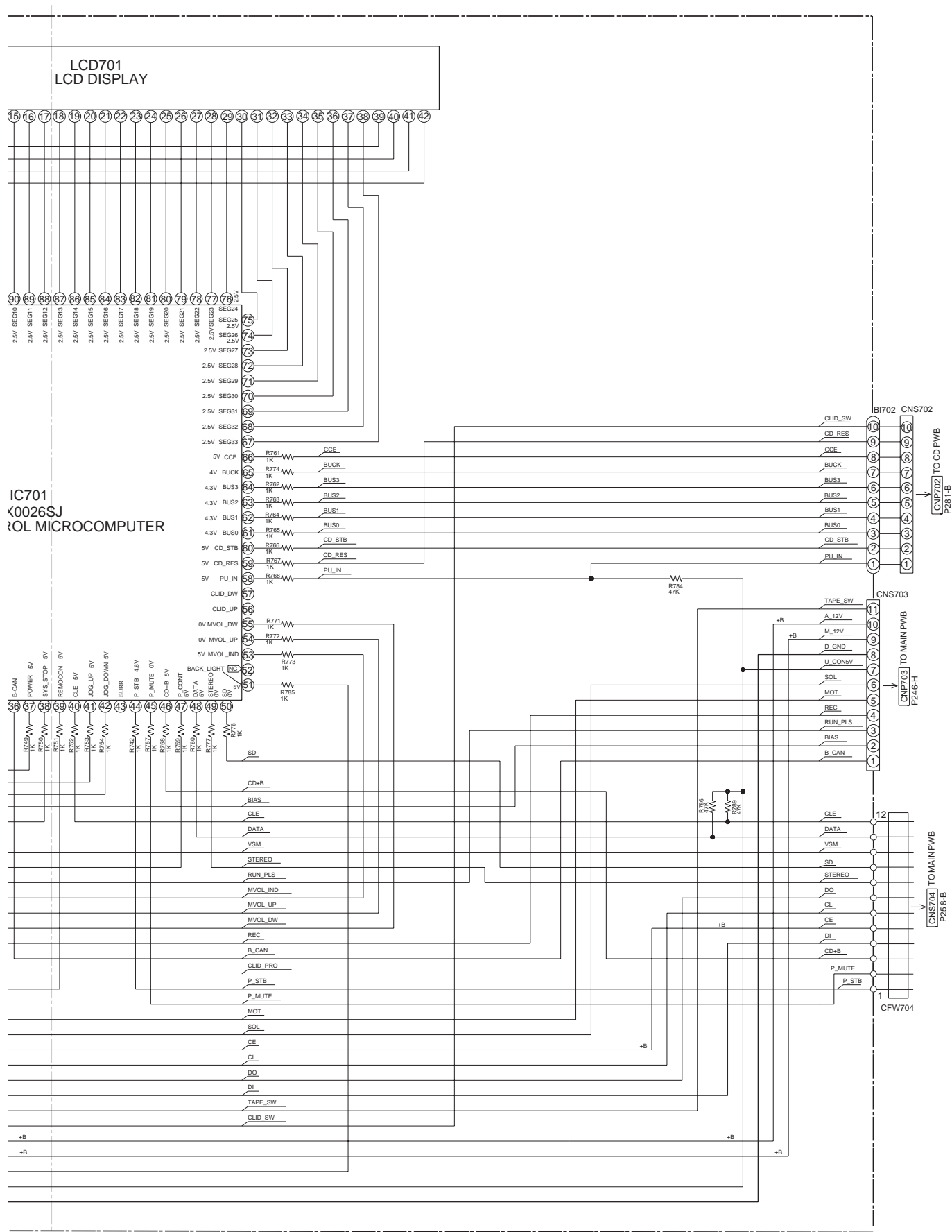


Figure 25 SCHEMATIC DIAGRAM (2/6)



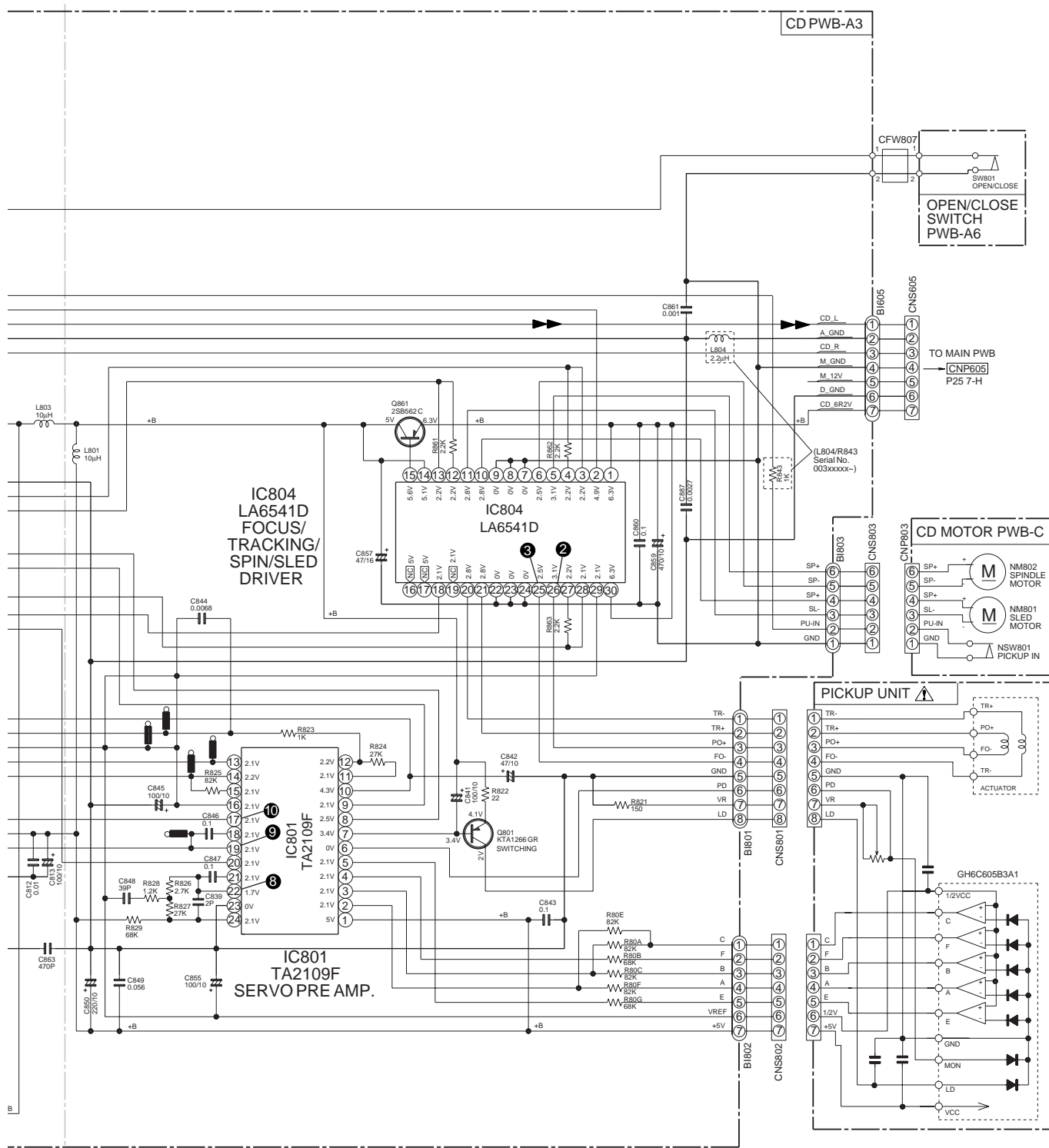
• NOTES ON SCHEMATIC DIAGRAM can be found on page 18.

Figure 26 SCHEMATIC DIAGRAM (3/6)





- 28 -



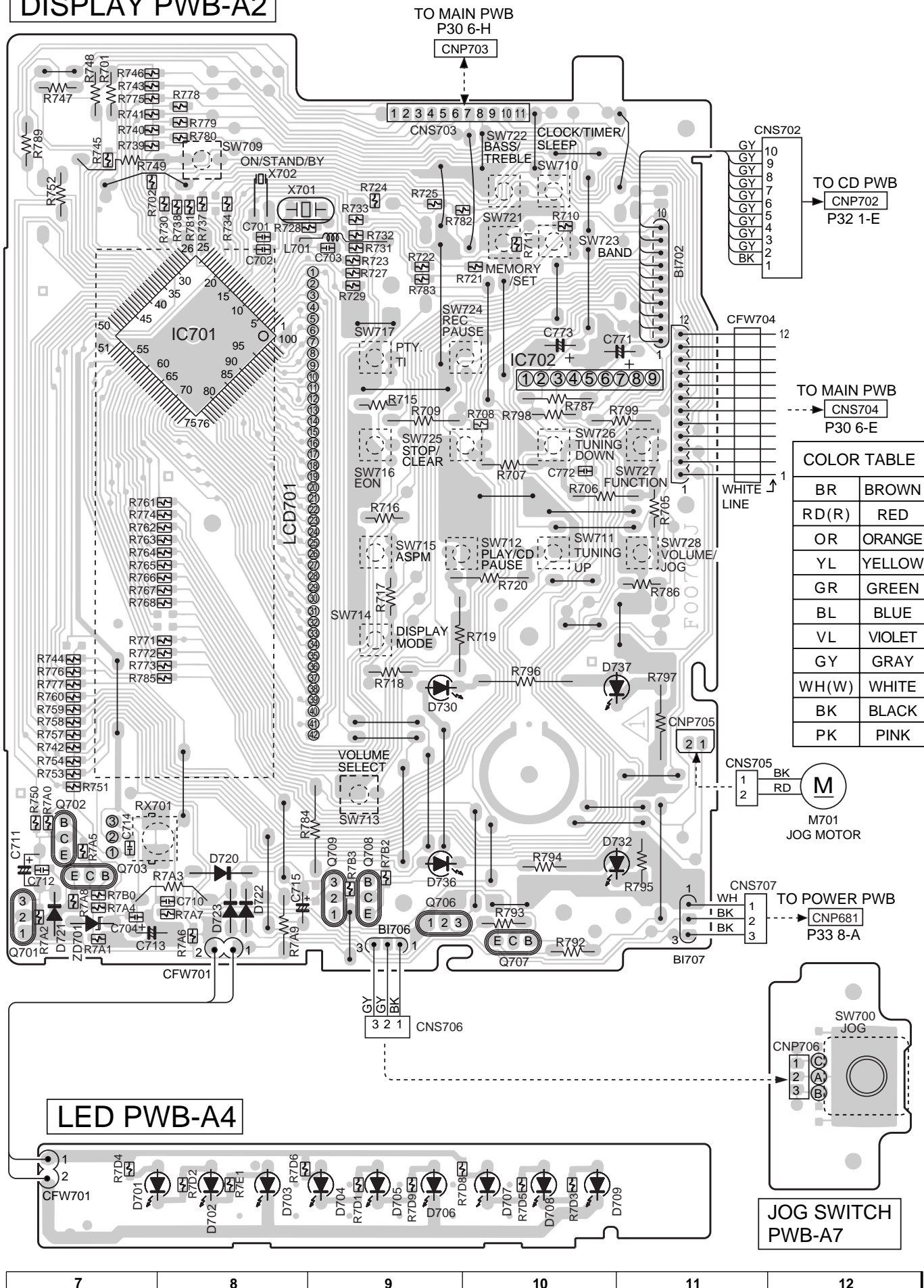
• The numbers ① to ⑰ are waveform numbers shown in page 19.

7	8	9	10	11	12
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Figure 29 SCHEMATIC DIAGRAM (6/6)

- 30 -

DISPLAY PWB-A2



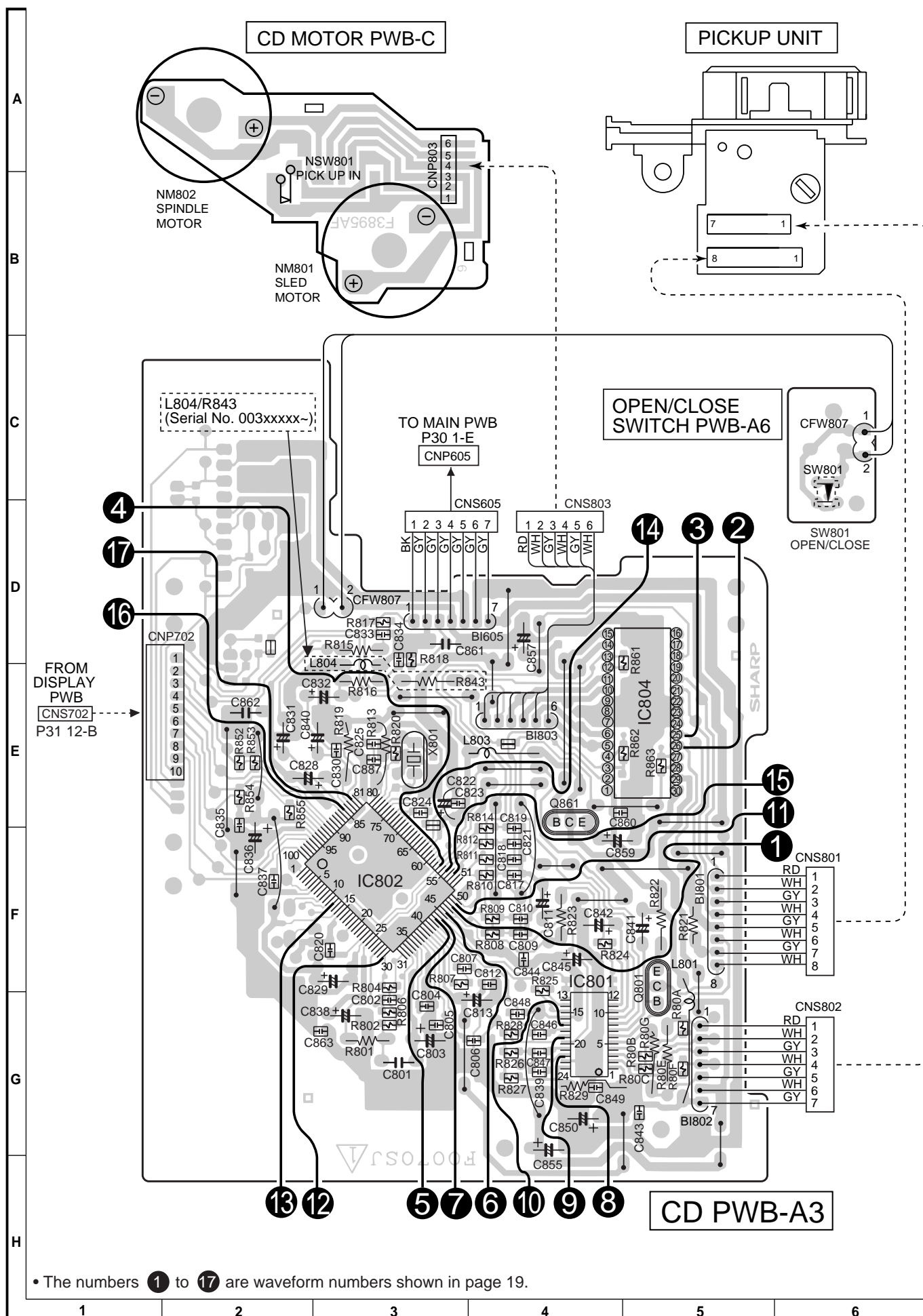
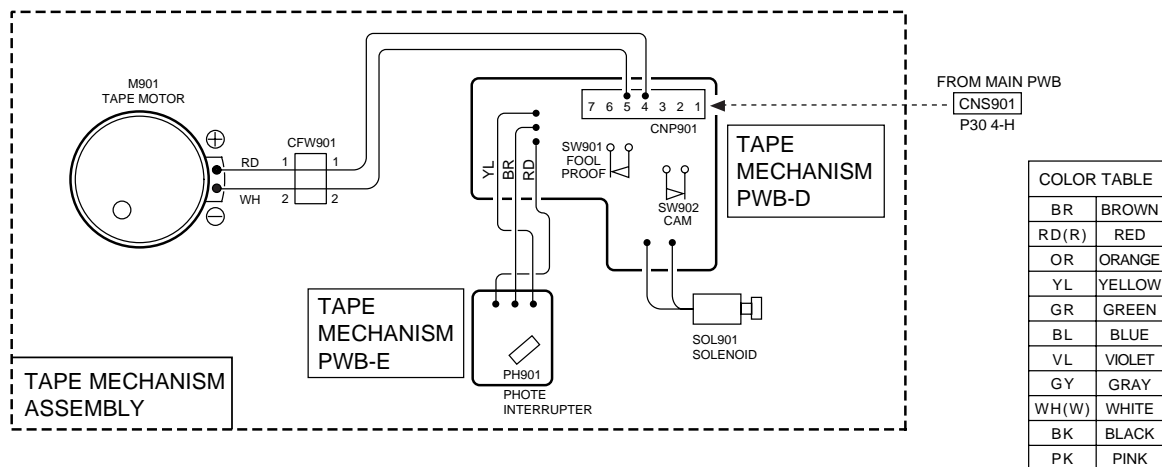
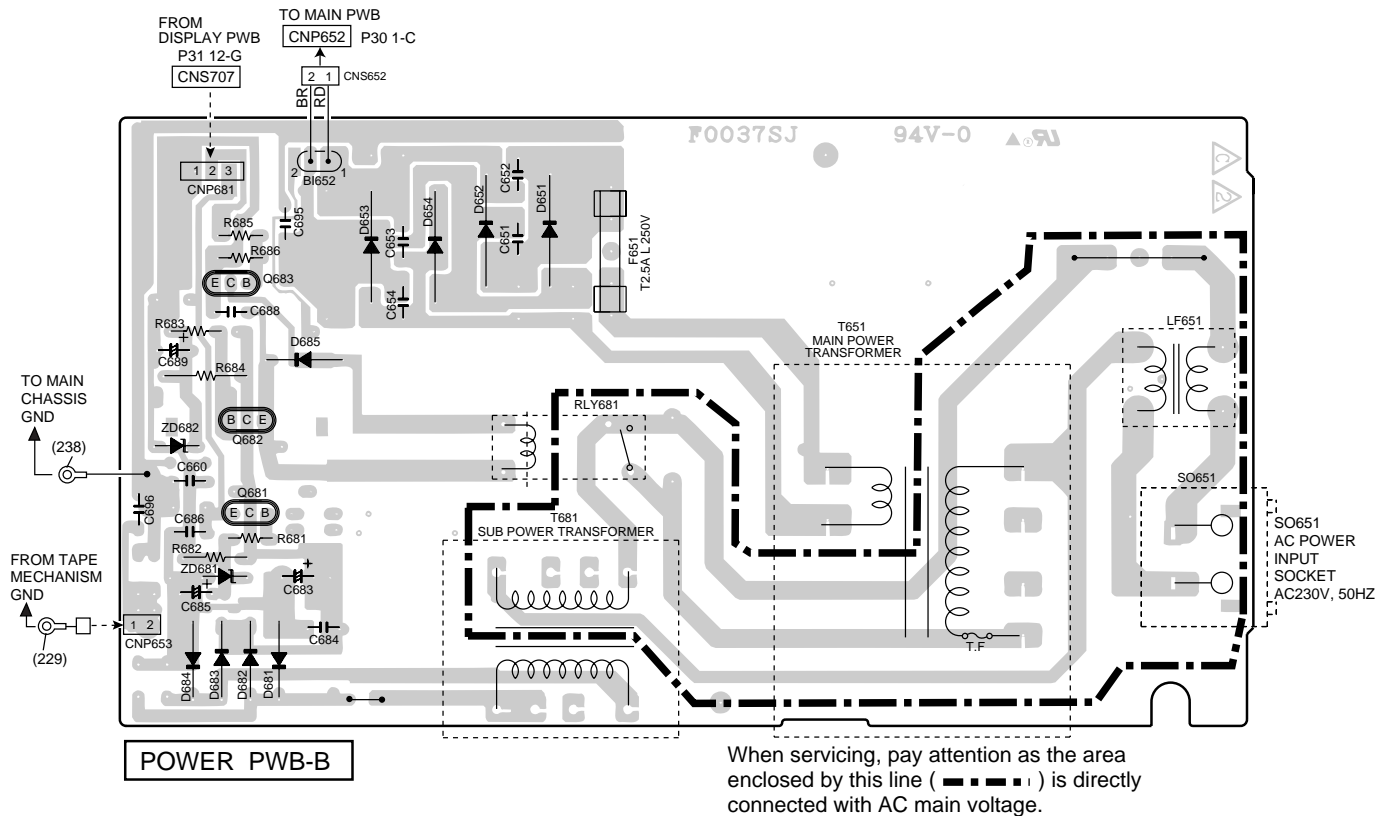


Figure 32 WIRING SIDE OF P.W.BOARD (3/4)



TROUBLESHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.

Remove the cabinet and follow the troubleshooting instructions.

"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

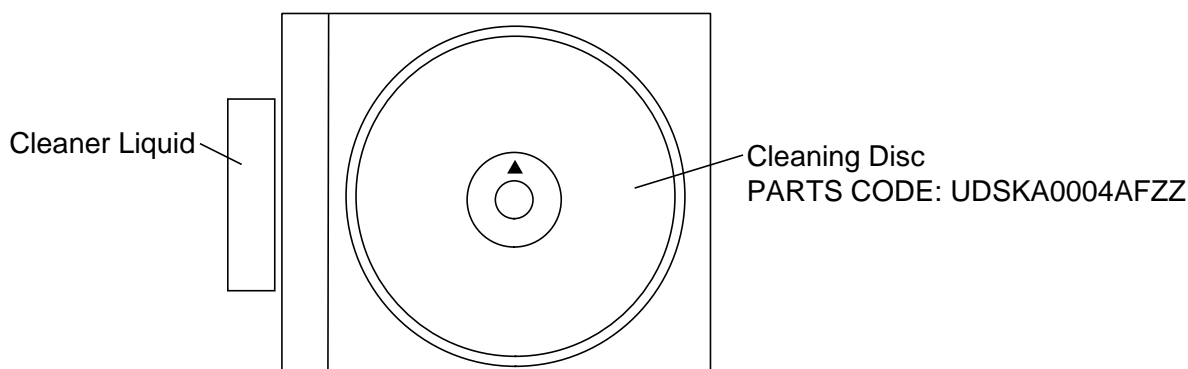
Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

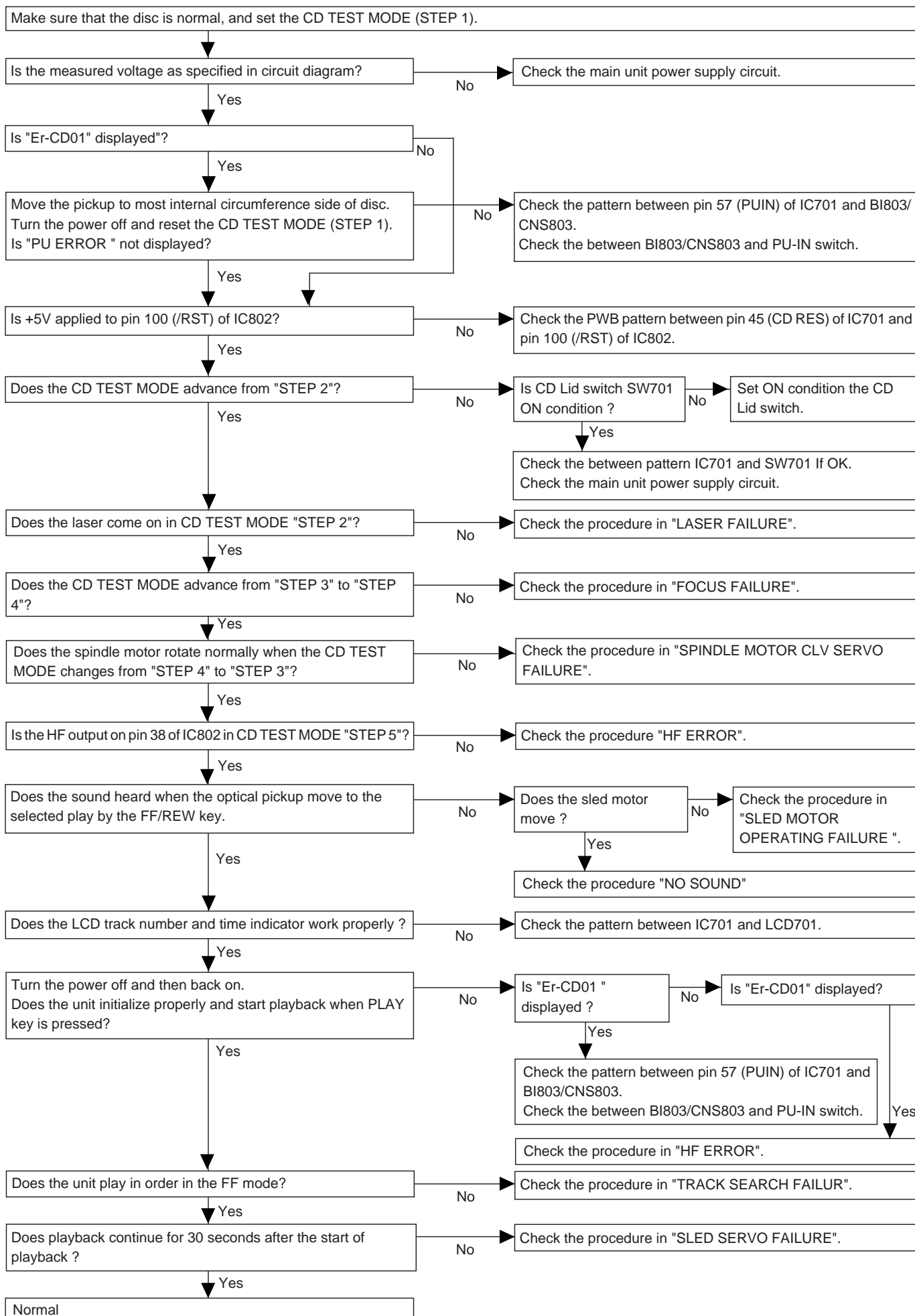
HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the ▲ mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down, then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continues to turn, press the stop button.

CAUTION

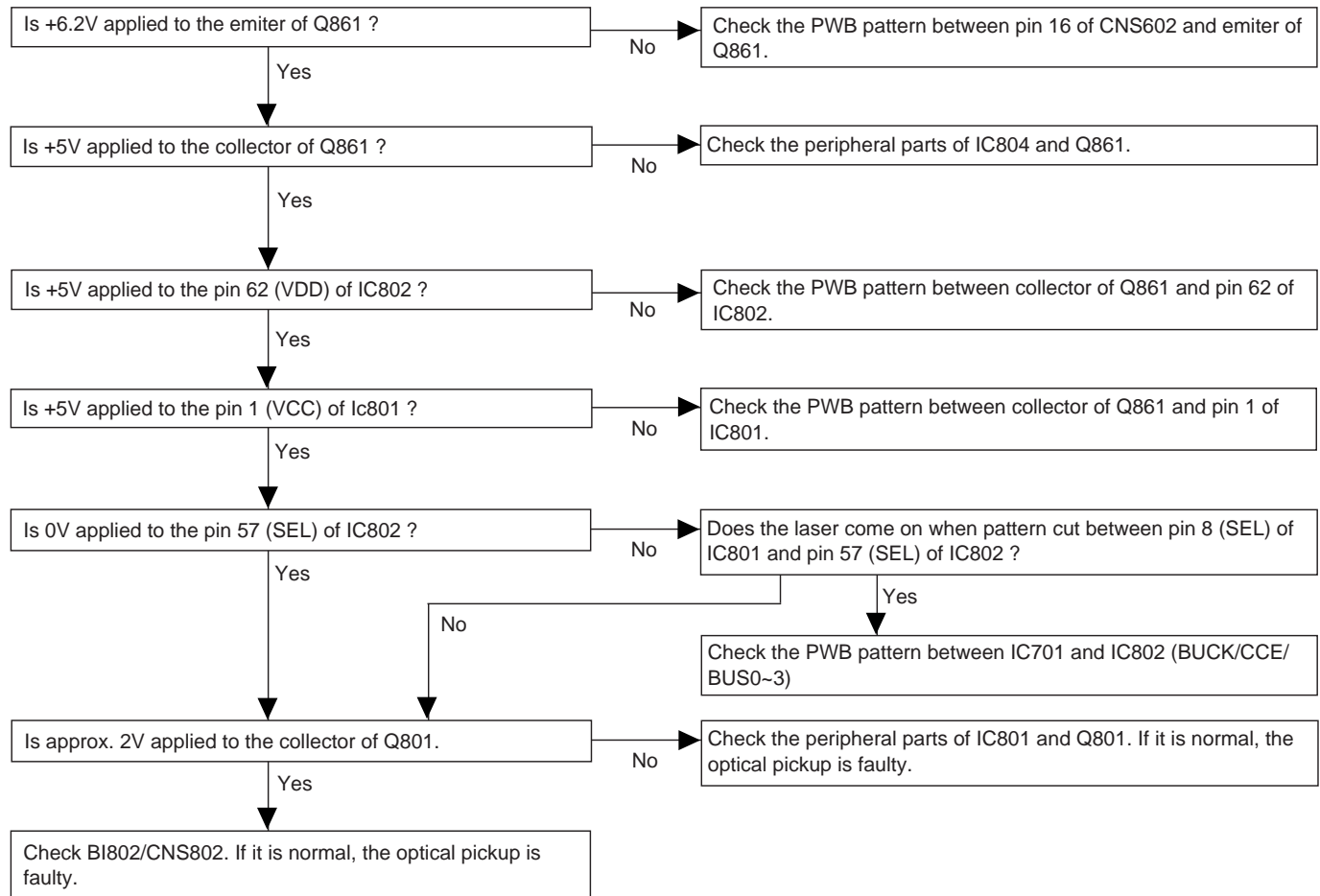
- The CD lens cleaner should be effective for 30~50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.



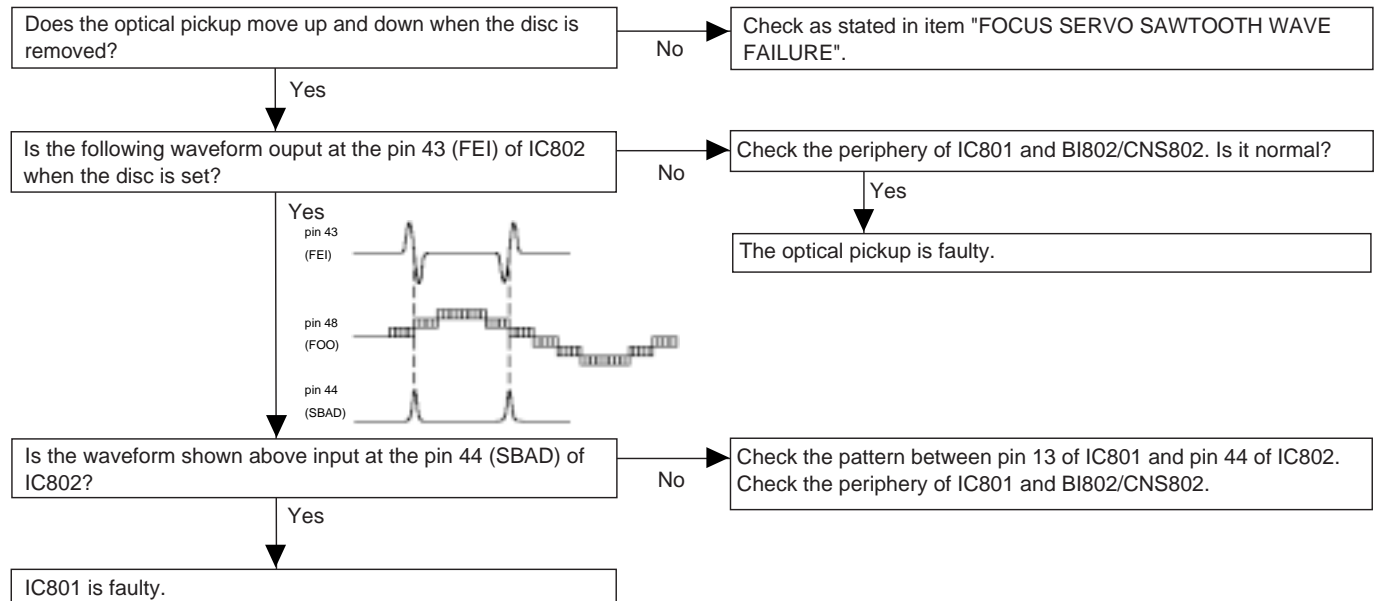


XL-40H/50H

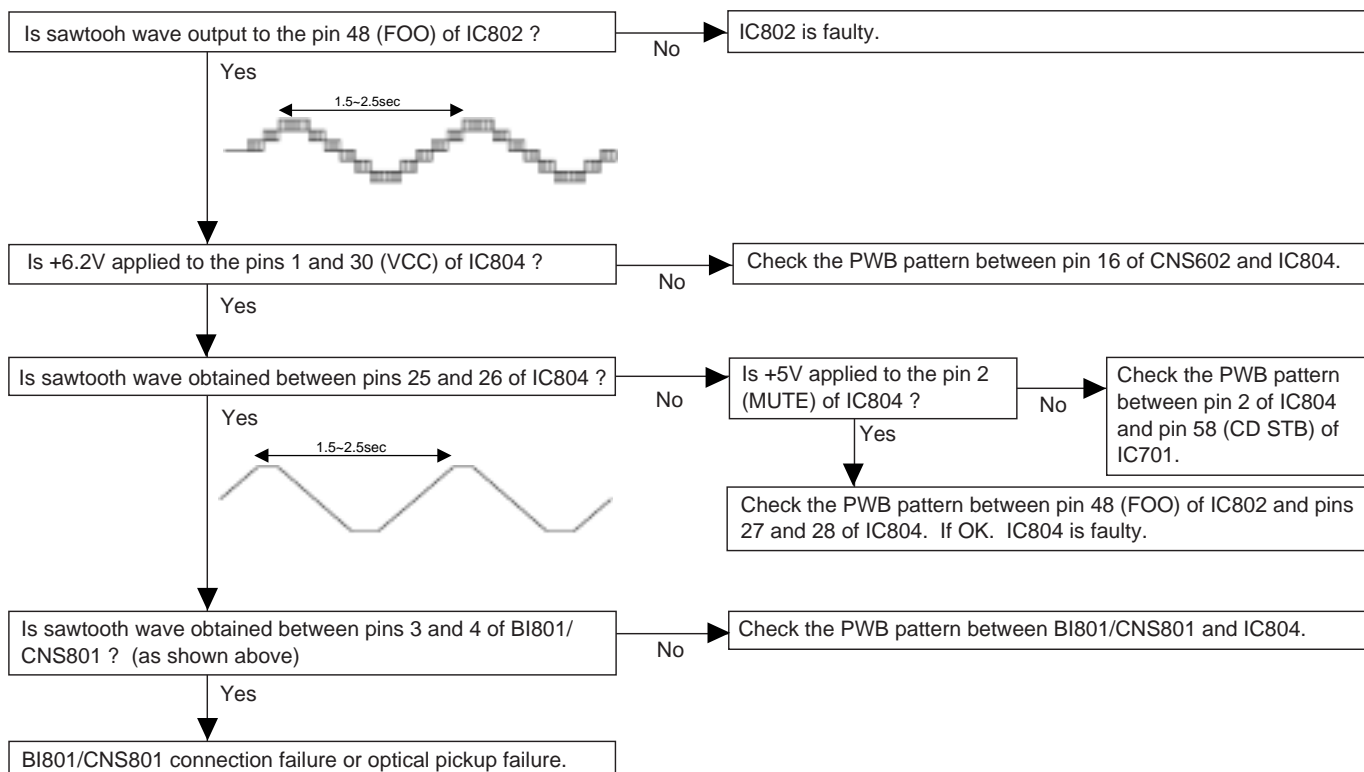
• Laser failure.



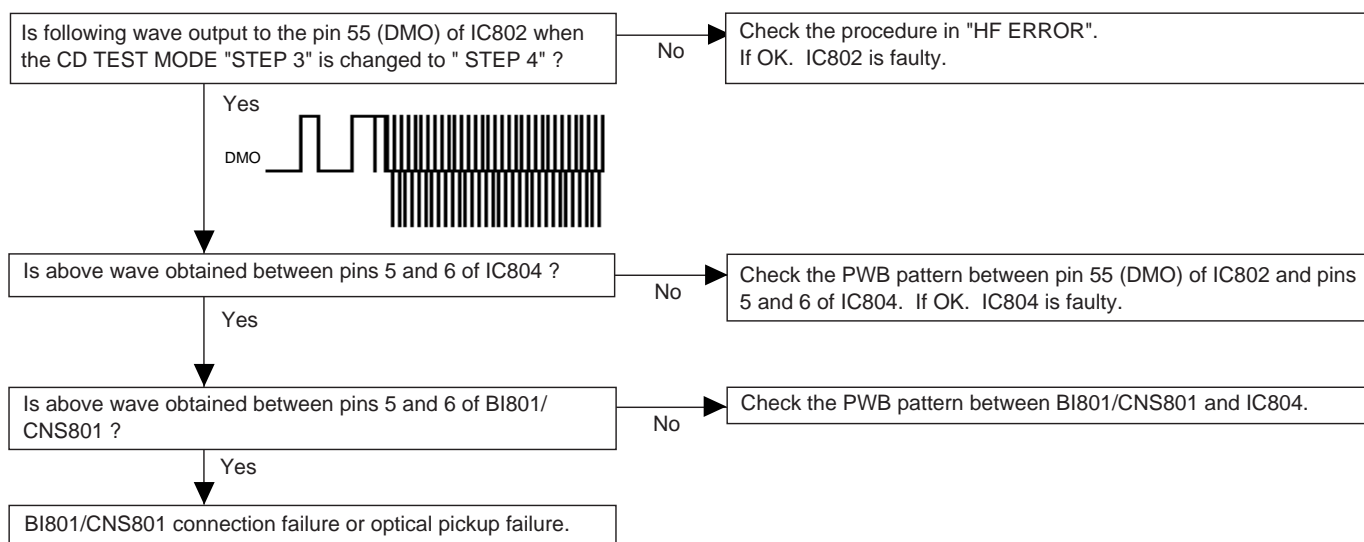
• Focus failure.



• Focus servo sawtooth wave failure.

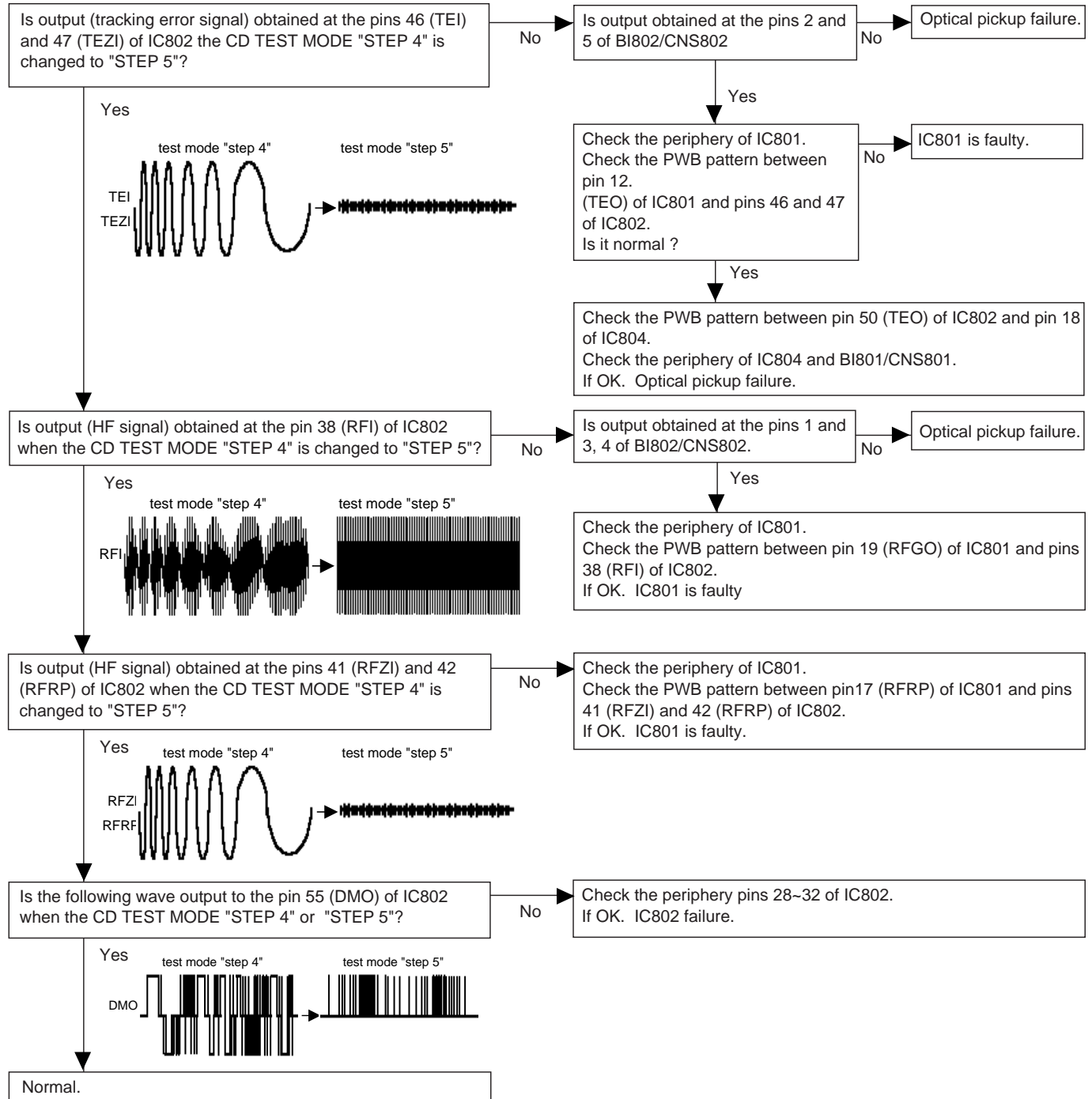


• Spindle motor clv servo failure.

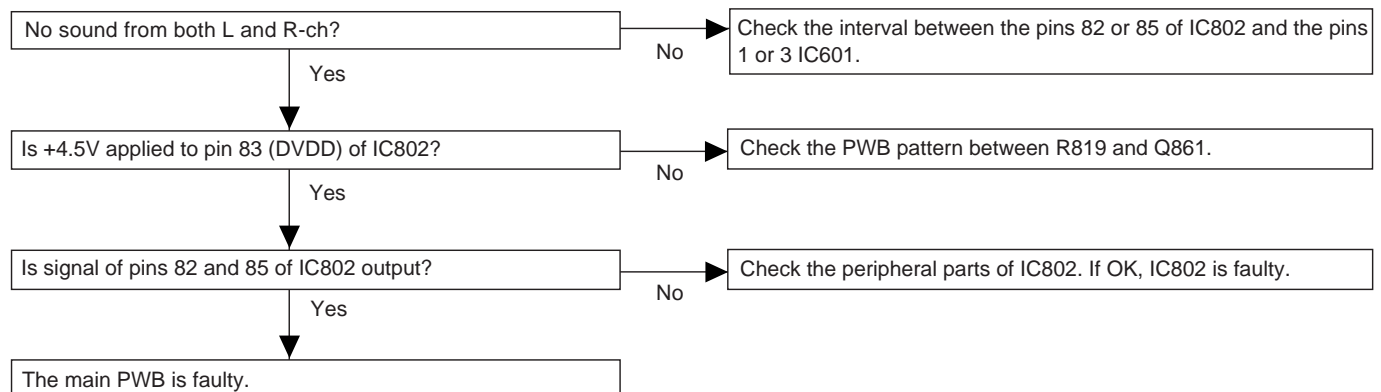


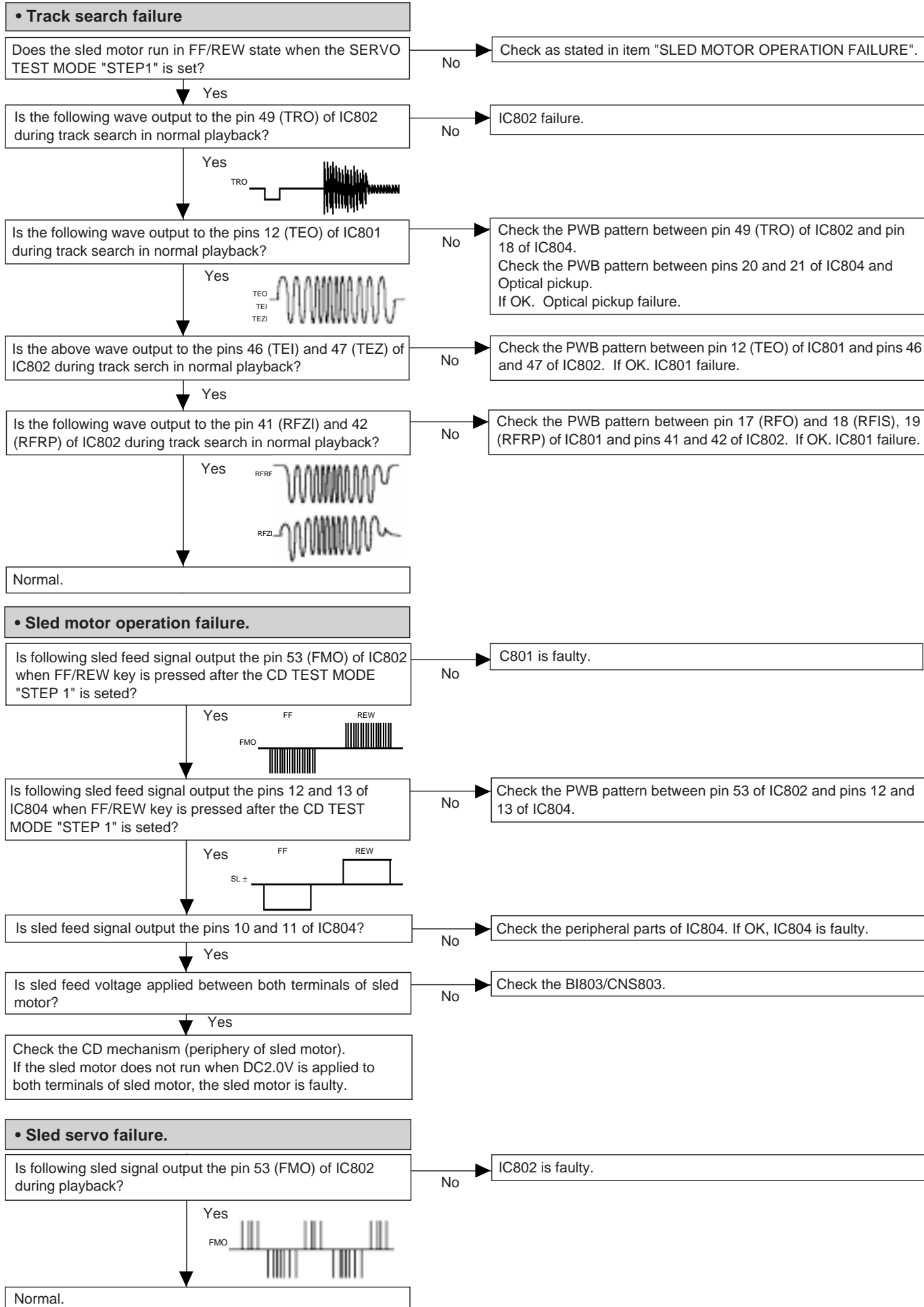
XL-40H/50H

• HF error.



• No sound.





FUNCTION TABLE OF IC

IC401 VHiLC75342M-1: Function/Volume Equalizer (LC75342M)

Pin No.	Port Name	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin. Data written into an internal latch in a timing of [H] -> [L]. Each analog switch is activated. Data transfer enabled at [H] level.
3	VSS	Ground pin.
4	TEST	Electronic volume control pin. To be set to the VSS potential.
5	LOUT	Volume + equalizer output pin.
6	LBASS2	Bass-band filter comprising capacitor and resistor connection pin.
7	LBASS1	Bass-band filter comprising capacitor and resistor connection pin.
8	LTRE	Capacitor connection pin comprising treble band filter.
9	LIN	Volume + equalizer input pin.
10	LSEL0	Input selector output pin.
11*	L4	Input signal pin.
12	L3	Input signal pin.
13	L2	Input signal pin.
14	L1	Input signal pin.
15*	NC	No CONNECT pin. To be open or connected to VSS.
16*	NC	No CONNECT pin. To be open or connected to VSS.
17	R1	Input signal pin.
18	R2	Input signal pin.
19	R3	Input signal pin.
20*	R4	Input signal pin.
21	RSEL0	Input selector output pin.
22	RIN	Volume + equalizer input pin.
23	RTRE	Capacitor connection pin comprising treble band filter.
24	RBASS1	Bass-band filter comprising capacitor and resistor connection pin.
25	RBASS2	Bass-band filter comprising capacitor and resistor connection pin.
26	ROUT	Volume + equalizer output pin.
27*	NC	No CONNECT pin. To be open or connected to VSS.
28	Vref	0.5 x VDD voltage generation block for analog ground. Capacitor of several 10μF to be connected between Vref and AWSS (VSS) as a counter measure against power ripple.
29	VDD	Supply pin.
30	CL	Serial data and clock input pin for control.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC401 VHiLC75342M-1: Function/Volume Equalizer (LC75342M)

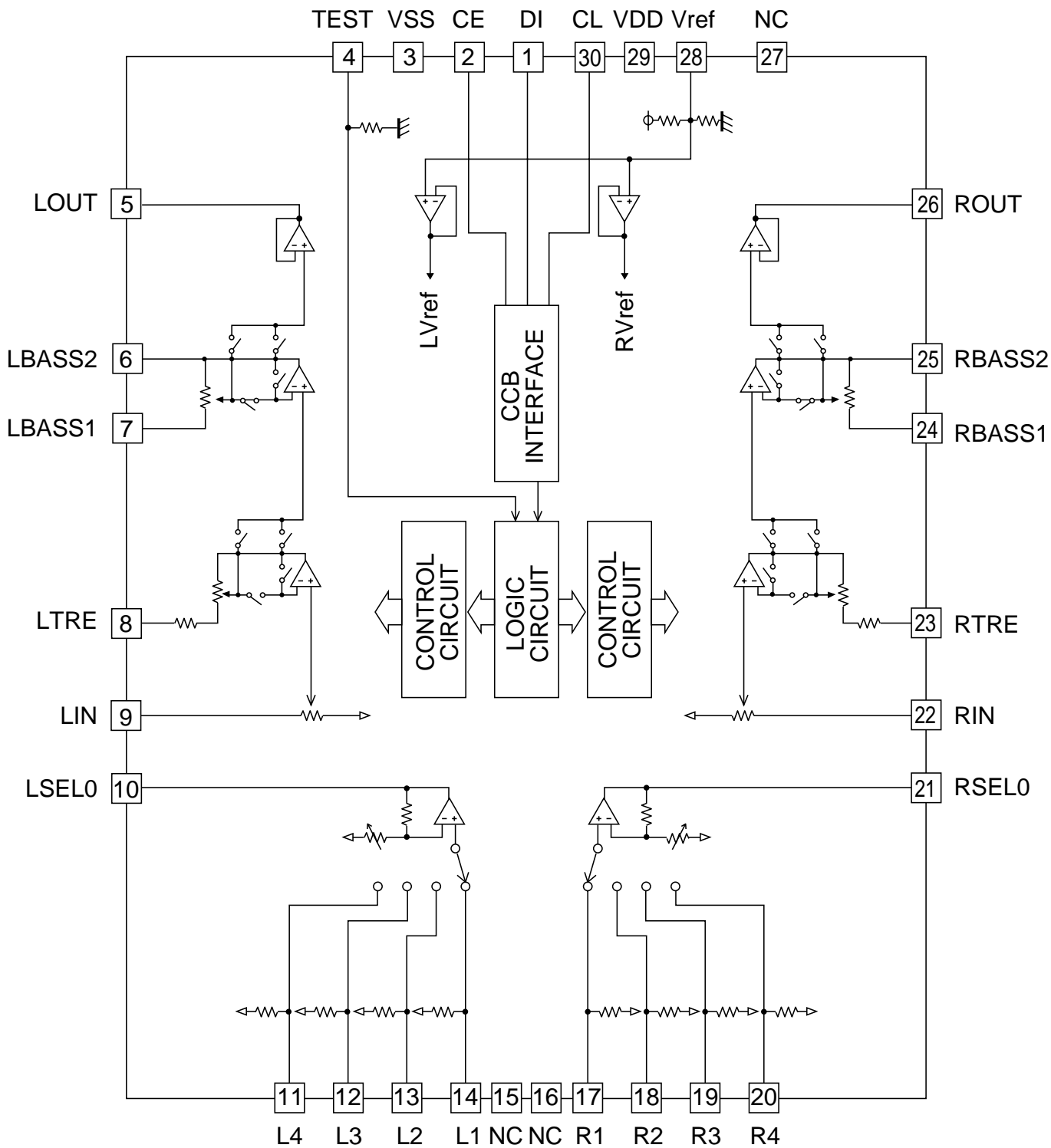


Figure 41 BLOCK DIAGRAM OF IC

XL-40H/50H**IC701 RH-iX0026SJZZ: System Microcomputer (IX0026SJ) (1/2)**

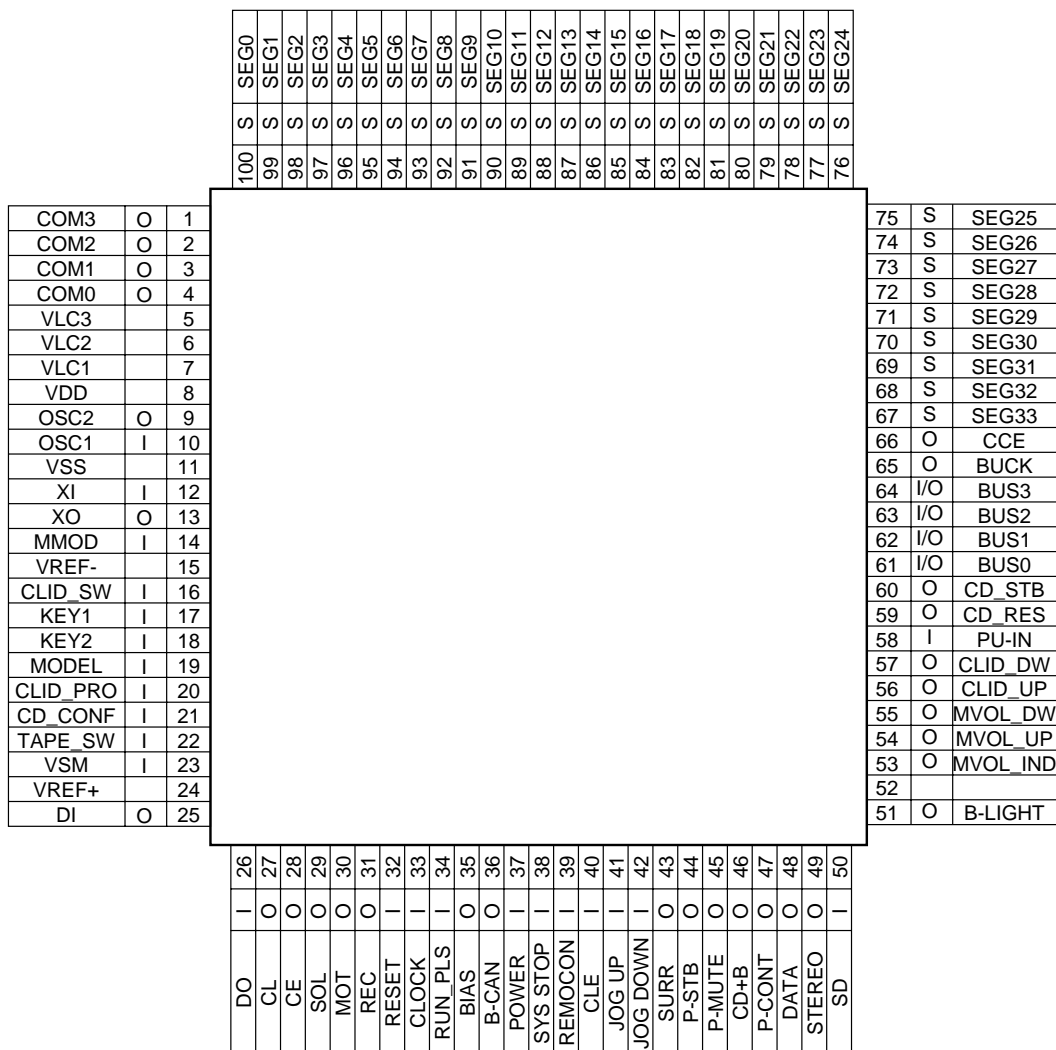
Pin No.	Terminal Name	Input/Output	Function
1-4	COM3-COM0	Output	LCD common output terminal.
5-7	VLC3-VLC1	—	LCD power supply terminal.
8	VDD	—	Microcomputer power supply +5V.
9	OSC2	Output	Oscillator ground terminal for main clock. f=8MHz
10	OSC1	Input	Oscillator ground terminal for main clock. f=8MHz
11	VSS	—	Microcomputer power supply GND.
12	XI	Input	Oscillator ground terminal for sub clock. f=32.768kHz
13	XO	Output	Oscillator ground terminal for sub clock. f=32.768kHz
14	MMOD	Input	Memory mode selection terminal.
15	VREF-	—	Power supply GND for AD converter.
16	KEY0 AN0/PA0	Input	CD lid status detection input.
17	KEY1 AN0/PA1	Input	Operation button input, Max-8 buttons.
18	KEY2 AN0/PA2	Input	Operation button input, Max-8 buttons.
19	KEY3 AN0/PA3	Input	MODEL/TUNER destination input.
20*	KEY4 AN0/PA4	Input	Current detection of CD lid control motor. Used to decide the CD lid drive error to control it.
21*	KEY5 AN0/PA5	Input	CD servo auto adjustment mode selection input.
22	KEY6 AN0/PA6	Input	Tape mechanism operating status detection input. Decides the F.P/CAM-SW status with A/D value.
23	KEY7 AN7/PA7	Input	Tuner signal meter (S meter) voltage input terminal.
24	VREF+	—	Power supply for A/D converter +5V.
25	TXD SBO0/P00	Output	Data output terminal to TUNER PLL IC.
26	RXD SBI0/P01	Input	Data input from TUNER PLL IC
27	SBT0/P02	Output	Synchronous clock output with TUNER PLL IC
28	SBO1/P03	Output	Enable output of TUNER PLL IC. "L" = OFF "H" = ON
29	SBI1/P04	Output	Tape mechanism solenoid drive control output.
30	SBT1/P05	Output	Tape mechanism motor drive control output.
31	DK/BZER P06	Output	Recording/playback selection output of tape circuit. "H" = Recording mode, "L" = Playback mode
32	RST/P27	Input	Reset signal input
33	RMOUT P10	Input	CLOCK/TIMER/SLEEP button input.
34	P11	Input	Tape run/END detection input. Decided as tape run if pulse is input.
35	TM2IO P12	Output	Recording bias oscillation circuit control output. "H" = Bias oscillation, "L" = oscillation stop.
36	TM3IO P13	Output	Recording bias oscillation frequency selection control output.
37	TM4IO P14	Input	Power (POWER) button input detection.
38	IRQ0 P20	Input	Switches to the HALT mode when changing to . "L" at power failure detection input.
39	SENS IRQ1/P21	Input	Remote control signal input.
40	IRQ2 P22	Input	Synchronous clock input with RDS IC.
41	IRQ3 P23	Input	Jog dial UP pulse input.
42	IRQ4 P24	Input	Jog dial DOWN pulse input.
43*	P30	Output	SURROUND control output.
44	P31	Output	POWER IC STAND-BY terminal CONTROL.
45	P32	Output	Power mute output. "H" = MUTE ON "L" = MUTE OFF
46	LED0 WE/P50	Output	CD servo power supply circuit control output. "H" = CD power ON "L" = CD power OFF
47	LED1 RE/P51	Output	Main TRANS RELAY CONTROL. "H" = ON "L" = OFF
48	LED2 CS/P52	Input	Data input from RDS IC.
49	LDE3/S51 A16/P53	Input	Radio stereo broadcast reception detection input. "L" = During stereo broadcast reception
50	LED4/S50 A17/P54	Input	Broadcast reception status detection input. "L" = During broadcasting signal reception
51	SEG49 P60/A0	Output	LCD backlight control signal output. "H" = Backlight ON, "L" = Backlight OFF
52*	SEG48 P61/A1	Output	
53	SEG47 P62/A2	Output	LED illumination control of electric JOG dial. "H" = ON "L" = OFF

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0026SJZZ: System Microcomputer (IX0026SJ) (2/2)

Pin No.	Terminal Name	Input/Output	Function
54	SEG46 P63/A3	Output	Electric JOG dial UP.
55	SEG45 P64/A4	Output	Electric JOG dial DOWN.
56*	SEG44 P65/A5	Output	Electric CD lid OPEN.
57*	SEG43 P66/A6	Output	Electric CD lid CLOSE.
58	SEG42 P67/A7	Input	CD pickup position detection SW input. "L" = Innerst periphery
59	SEG41 P70/A8	Output	Reset signal output for TC9462F
60	SEG40 P71/A9	Output	ON/OFF output terminal of CD servo control IC. "H" = Servo ON "L" = Servo stand-by
61-64	SEG39 P72/A10- SEG36 P75/A13	Input/Output	Data input/output terminal for TC9462F control.
65	SEG35 P76/A14	Output	Data synchronous clock output for TC9462F.
66	SEG34 P77/A15	Output	Chip enable terminal for TC9462F. "L" = BUS terminal active
67	SEG33 P87/D7	—	LCD segment output.
68	SEG32 P86/D6	—	LCD segment output.
69-74	SEG31 P85/D5- SEG26 P80/D0	—	LCD segment output Note: Since RH-*****SJZZ, SEG0 of the LCD is connected by the 24-pin LCD to SEG7 of the microcomputer output terminal, and connections are made up to the shift SEG26 in order.
75-100	SEG25-SEG0	—	LCD segment output Note: Since RH-*****SJZZ, SEG0 of the LCD is connected by the 24-pin LCD to SEG7 of the microcomputer output terminal, and connections are made up to the shift SEG26 in order.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

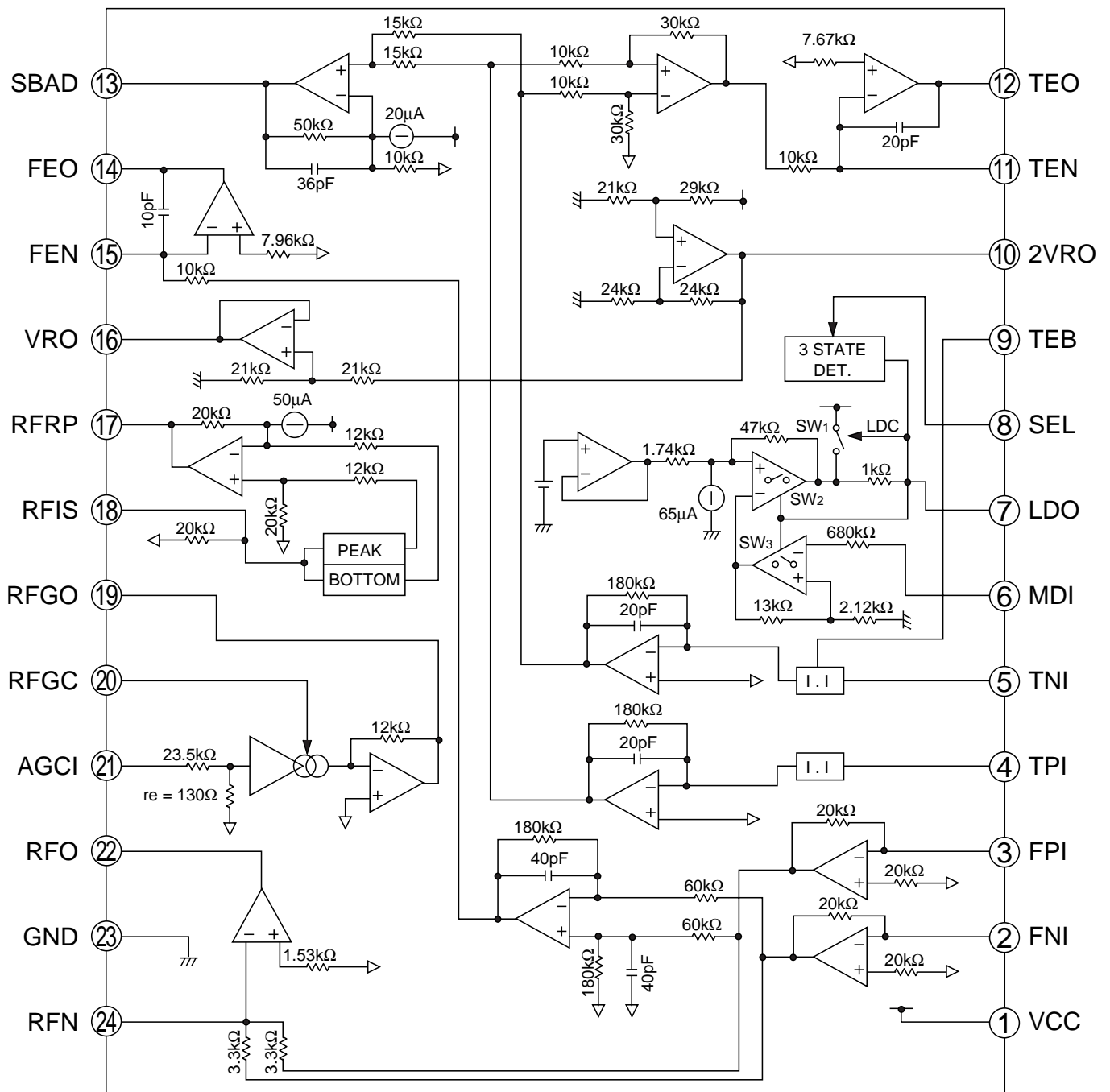
IC701 RH-iX0026SJZZ: System Microcomputer (IX0026SJ)**Figure 43 BLOCK DIAGRAM OF IC**

XL-40H/50H

IC801 VHiTA2109F/-1: Servo Pre Amp. (TA2109F)

Pin No.	Terminal Name	Input/Output	Function
1	VCC	—	Power voltage terminal
2	FNI	Input	Main beam amp input terminal
3	FPI	Input	Main beam amp input terminal
4	TPI	Input	Sub-beam amp input terminal
5	TNI	Input	Sub-beam amp input terminal
6	MDI	Input	Monitor photodiode amp input terminal
7	LDO	Output	Laser diode amp output terminal
8	SEL	Input	Laser diode control signal input and APC circuit ON/OFF signal input terminal
9	TEB	Input	Tracking error balance adjustment signal input terminal To be controlled by 3-value PWM signal. (PWM carrier = 88.2 kHz)
10	2VRO	Output	Standard voltage (2VR) output terminal. When Vcc = 5V, 2VR = 4.2V.
11	TEN	Input	Tracking error signal generation amp reversed phase input terminal
12	TEO	Output	Tracking error signal generation amp output terminal
13	SBAD	Output	Sub-beam addition signal output terminal
14	FEO	Output	Focus error signal generation amp output terminal
15	FEN	Input	Focus error signal generation amp reversed phase input terminal
16	VRO	Output	Standard voltage (VR) output terminal. When Vcc = 5V, VR = 2.1V.
17	RFRP	Output	Track count signal generation amp output terminal
18	RFIS	Input	RFRP detection circuit input terminal
19	RFGO	Output	RF signal output terminal
20	RFGC	Input	RF amplitude adjustment control signal input terminal The amplitude of RF signal can be controlled by using the 3-value PWM signal (PWM carrier = 88.2 kHz) which is output from the RFGC terminal of TC9432F.
21	AGCI	Input	RF signal amplitude adjustment amp input terminal
22	RFO	Output	RF signal generation amp output terminal
23	GND	—	GND terminal
24	RFN	Input	RF reversed phase input terminal

IC801 VHiTA2109F/-1: Servo Pre Amp. (TA2109F)



SEL	LDC		
	SW1	SW2	SW3
L	ON	OFF	OFF
HiZ	OFF	ON	ON
H	OFF	ON	ON

Figure 45 BLOCK DIAGRAM OF IC

XL-40H/50H

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (1/3)

Pin No.	Port Name	Input/Output	Function															
1*	TEST0	Input	Test mode terminal. To be opened usually.															
2*	/HSO /UHSO	Output Output	Playback speed mode flag output terminal. <table><tr><td>/UHSO</td><td>/HSO</td><td>Playback speed</td></tr><tr><td>H</td><td>H</td><td>x1 speed playback</td></tr><tr><td>H</td><td>L</td><td>x2 speed playback</td></tr><tr><td>L</td><td>H</td><td>x4 speed playback</td></tr><tr><td>L</td><td>L</td><td>—</td></tr></table>	/UHSO	/HSO	Playback speed	H	H	x1 speed playback	H	L	x2 speed playback	L	H	x4 speed playback	L	L	—
/UHSO			/HSO	Playback speed														
H			H	x1 speed playback														
H			L	x2 speed playback														
L			H	x4 speed playback														
L	L	—																
3*																		
4*	EMPH	Output	Sub-code Q data emphasis flag output terminal. "H": Emphasis ON "L": Emphasis OFF The output polarity can be inverted by command.															
5*	LRCK	Output	Channel clock (44.1 kHz) output terminal. "L": L channel "H": R channel The output polarity can be inverted by command.															
6	VSS	—	Digital ground terminal.															
7*	BCK	Output	Bit clock (1.4122 MHz) output terminal.															
8*	AOUT	Output	Audio data output terminal.															
9*	DOUT	Output	Digital out output terminal.															
10*	MBOV	Output	Buffer memory over signal output terminal. "H": Over															
11*	IPF	Output	Correction flag output terminal. "H": When AOUT output is correction-disabled symbol in case of C2 correction output.															
12*	SBOK	Output	Sub-code Q data CRCC judgment result output terminal. "H": When judgment result is OK.															
13*	CLCK	Input/Output	Sub-code P-W data read clock output/input terminal. Selectable with command bit.															
14	VDD	—	Digital + power terminal.															
15	VSS	—	Digital ground terminal.															
16*	DATA	Output	Sub-code P-W data output terminal.															
17*	SFSY	Output	Playback system frame sync signal output terminal.															
18*	SBSY	Output	Sub-code block sync output terminal. "H": On S1 position when the sub-code sync is detected.															
19*	SPCK	Output	Processor status signal read clock (176.4 kHz) output terminal.															
20*	SPDA	Output	Processor status signal output terminal.															
21*	COFS	Output	Correction system frame clock (7.35 kHz) output terminal.															
22*	MONIT	Output	LSI internal signal monitor terminal. It is possible to monitor the DSP internal flag and PLL system clock with the microcomputer command. Terminal for serial output of text data according to command.															
23	VDD	—	Digital + power terminal.															
24	TESIO0	Input	Test input/output terminal. To be fixed to "L" usually. Terminal to input the text data read clock according to command.															
25	P2VREF	—	2VREF terminal for PLL system.															
26*	HSSW	Output	VREF voltage in case of x2 speed/x4 speed.															
27*	ZDET	Output	1-bit DAC zero detection flag output terminal.															
28	PDO	Output	Terminal to output the phase difference between EFM signal and PLCK signal.															
29*	TMAXS	Output	TMAX detection result output terminal. To be selected with command bit TMPS.															
30	TMAX	Output	TMAX detection result output terminal. To be selected with command bit TMPS. <table><tr><td>TMAX detection result</td><td>TMAX output</td></tr><tr><td>Longer than specific period</td><td>"P2VREF"</td></tr><tr><td>Shorter than specific period</td><td>"VSS"</td></tr><tr><td>Within specific period</td><td>"HIZ"</td></tr></table>	TMAX detection result	TMAX output	Longer than specific period	"P2VREF"	Shorter than specific period	"VSS"	Within specific period	"HIZ"							
TMAX detection result	TMAX output																	
Longer than specific period	"P2VREF"																	
Shorter than specific period	"VSS"																	
Within specific period	"HIZ"																	
31	LPFN	Input	Low-pass filter amp inverted input terminal.															
32	LPFO	Output	Low-pass filter amp output terminal.															
33	PVREF	—	VREF terminal for PLL system.															
34	VCOREF	Input	VCO center frequency standard level terminal. To be fixed to PVref usually.															
35	VCOF	Output	VCO filter terminal.															
36	AVSS	—	Analog system ground terminal.															
37	SLCO	Output	Data slice level generation DAC output terminal.															
38	RFI	Input	RF signal input terminal.															

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (2/3)

Pin No.	Port Name	Input/Output	Function
39	AVDD	—	Analog system power terminal.
40	RFCT	Input	RFRP signal center level input terminal.
41	RFZI	Input	RFRP zero cross input terminal.
42	RFIP	Input	RF ripple signal input terminal.
43	FEI	Input	Focus error signal input terminal.
44	SBAD	Input	Sub-beam addition signal input terminal.
45	TSIN	Input	Test input terminal. To be fixed to Vref usually.
46	TEI	Input	Tacking error input terminal. (Tracking servo ON: Taking-in).
47	TEZI	Input	Tracking error, zero cross input terminal.
48	FOO	Output	Focus equalizer output terminal.
49	TRO	Output	Tracking equalizer output terminal.
50	VREF	—	Analog standard power terminal.
51	RFGC	Output	RF amplitude adjustment control signal output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
52	TEBC	Output	Tracking balance control signal output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
53	FMO	Output	Feed equalizer output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
54*	FVO	Output	Speed error signal or feed search EQ output terminal. 3-value PWM signal is output. (PWM carrier = 88.2 kHz)
55	DMO	Output	Disc equalizer output terminal. 3-value PWM signal is output. (PWM carrier = DSP system 88.2 kHz, sync with PXO)
56	2VREF	—	Analog standard power terminal (2xVREF)
57	SEL	Output	APC circuit ON/OFF signal output terminal. When laser is ON and UHS = L, "Hi-Z". When UHS = H, "H" output is obtained.
58*	FLGA	Output	Internal signal monitor external flag output terminal. TEZC, FOON, FOK and RFZC signals can be selected with command.
59*	FLGB	Output	Internal signal monitor external flag output terminal. DFCT, FOON, FMON and RFZC signals can be selected with command.
60*	FLGC	Output	Internal signal monitor external flag output terminal. TRON, TRSR, FOK, and SRCH signals can be selected with command.
61*	FLGD	Output	Internal signal monitor external flag output terminal. TRON, DMON, HYS and SHC signals can be selected with command.
62	VDD	—	Digital + power terminal.
63	VSS	—	Digital ground terminal.
64*	IO0	Input/Output	General-use I/O port.
65*	IO1		The input port and output port can be selected with command. In case of input port the terminal
66*	IO2		state (H/L) can be read with the read command.
67*	IO3		In case of output port the terminal state (H/L/HiZ) can be controlled with command.
68*	/DMOUT	Input	Terminal to set the mode to output 2-value PWM of feed equalizer from IO0,1 terminal and 2-value PWM of disc equalizer from IO2,3 terminal. "L" active
69*	/CKSE	Input	To be opened usually.
70*	/DACT	Input	DAC test mode terminal. To be opened usually.
71	TESIN	Input	Test input terminal (externally provided VCO clock input terminal). To be fixed to "L" usually.
72	TESIO1	Input	Test input/output terminal. To be fixed to "L" usually.
73	VSS	—	Digital ground terminal.
74	PXI	Input	DSP system clock oscillation circuit input terminal. To be fixed to "L" usually.
75*	PXO	Output	DSP system clock oscillation circuit output terminal.
76	VDD	—	Digital + power terminal.
77	XVSS	—	System clock oscillation circuit ground terminal.
78	XI	Input	System clock oscillation input terminal.
79	XO	Output	System clock oscillation circuit output terminal.
80	XVDD	—	System clock oscillation circuit + power terminal.
81	DVSR	—	R channel D/A converting section power terminal.
82	RO	Output	R channel data forward rotation output terminal.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F) (3/3)

Pin No.	Port Name	Input/Output	Function
83	DVDD	—	D/A converting section power terminal.
84	DVR	—	Reference voltage terminal.
85	LO	Output	L channel data forward rotation output terminal.
86	DVSL	—	L channel D/A converting section power terminal.
87*	TEST1	Input	Test mode terminal. To be opened usually.
88*	TEST2	Input	Test mode terminal. To be opened usually.
89*	TEST3	Input	Test mode terminal. To be opened usually.
90-93	BUS0-BUS3	Input/Output	Microcomputer interface data input/output terminal.
94	VDD	—	Digital + power terminal.
95	VSS	—	Digital ground terminal.
96	BUCK	Input	Microcomputer interface clock input terminal.
97	/CCE	Input	Microcomputer interface chip enable signal input terminal. "L": BUS0 to 3 is active.
98*	TEST4	Input	Test mode termina. To be opened usually.
99*	/TSMOD	Input	Local test mode selection terminal.
100	/RST	Input	Reset signal input terminal. "L": Reset.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC802 VHiTC9462F/-1: Servo/Signal Control (TC9462F)

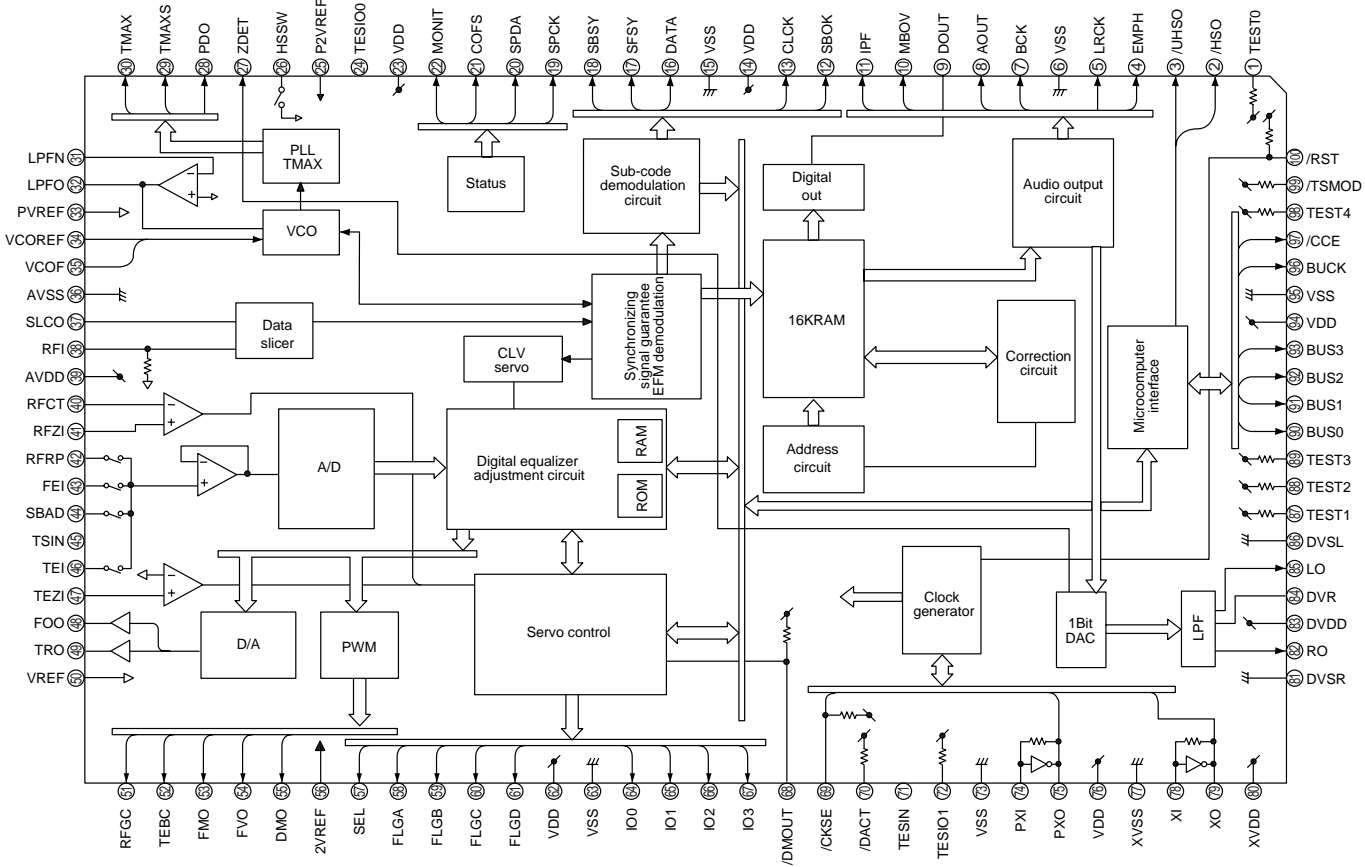


Figure 48 BLOCK DIAGRAM OF IC

IC804 VHiLA6541D/-1: Focus/Tracking/Spin/Sled Driver (LA6541D)

Pin No.	Port Name	Function
1	VCC	Power (short-circuited to pin 30)
2	MUTE	All BTL AMP output ON/OFF
3	VIN1	BTL AMP1 input terminal
4	VG1	BTL AMP1 input terminal (for gain adjustment)
5	VO1	BTL AMP1 output terminal (noninversion side)
6	VO2	BTL AMP1 output terminal (inversion side)
7	GND	GND terminal (lowest potential)
8	GND	GND terminal (lowest potential)
9	GND	GND terminal (lowest potential)
10	VO3	Output terminal of BTL AMP2 (inversion side)
11	VO4	Output terminal of BTL AMP2 (noninversion side)
12	VG2	Input terminal of BTL AMP2 (for gain adjustment)
13	VIN2	Input terminal of BTL AMP2
14	REG OUT	Connect the collector of externally provided transistor (PNP). 5V power output
15	REG IN	Connect the base of externally provided transistor (PNP).
16*	RES	Reset output
17*	CD	Reset output delay time setting (capacitor provided externally)
18	VIN3	Input terminal of BTL AMP3
19*	VG3	Input terminal of BTL AMP3 (for gain adjustment)
20	VO5	Output terminal of BTL AMP3 (noninversion side)
21	VO6	Output terminal of BTL AMP3 (inversion side)
22	GND	GND terminal (lowest potential)
23	GND	GND terminal (lowest potential)
24	GND	GND terminal (lowest potential)
25	VO7	Output terminal of BTL AMP4 (inversion side)
26	VO8	Output terminal of BTL AMP4 (noninversion side)
27	VG4	Input terminal of BTL AMP4 (for gain adjustment)
28	VIN4	Input terminal of BTL AMP4
29	VREF	Application of standard voltage of level shift circuit
30	VCC	Power (short-circuited to pin 1)

*GND (lowest potential) is connected to the frame of pin center.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

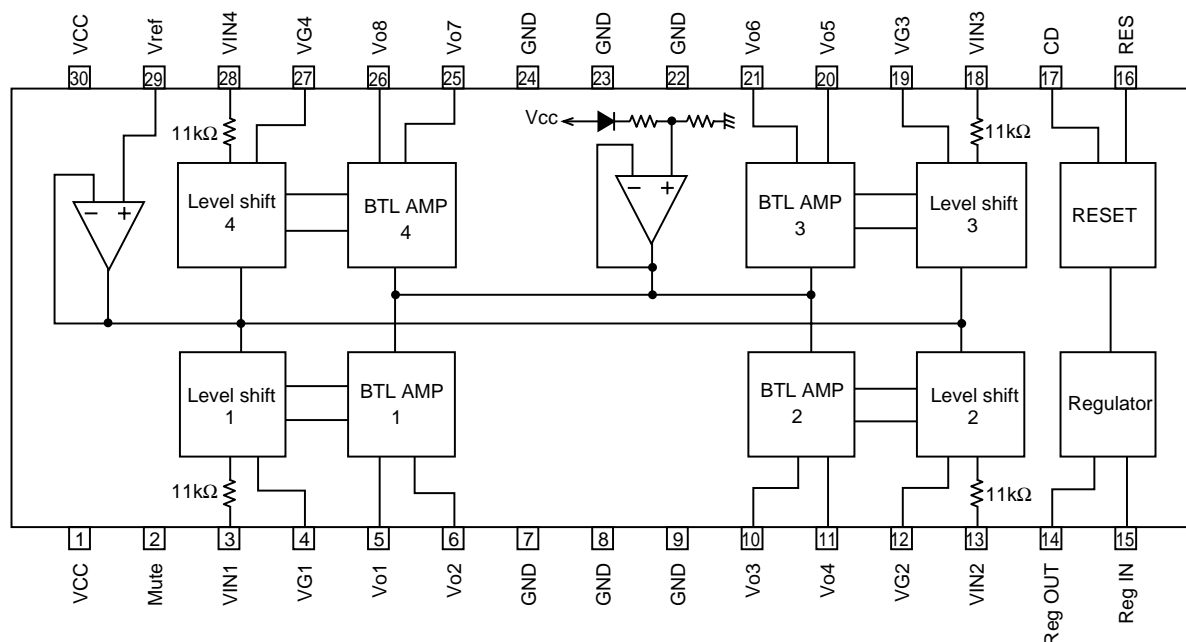
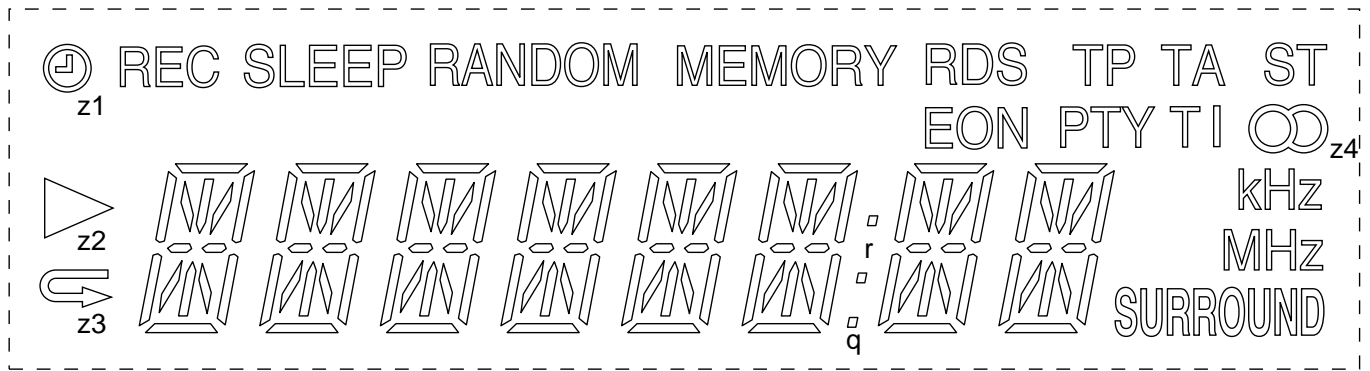
IC804 VHiLA6541D/-1: Focus/Tracking/Spin/Sled Driver (LA6541D)

Figure 49 BLOCK DIAGRAM OF IC

XL-40H/50H

LCD701: RV-LX0007SJZZ LCD Display



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

PinNo	com1	com2	com3	com4
1	com1			
2		com2		
3			com3	
4				com4
5	z1	b1	c1	z2
6	h1	j1	l1	k1
7	g1	n1	m1	d1
8	a1	p1	f1	e1
9	REC	b2	c2	z3
10	h2	j2	l2	k2
11	g2	n2	m2	d2
12	a2	p2	f2	e2
13	SLEEP	b3	c3	MHz
14	h3	j3	l3	k3
15	g3	n3	m3	d3
16	a3	p3	f3	e3
17	RANDOM	b4	c4	kHz
18	h4	j4	l4	k4
19	g4	n4	m4	d4
20	a4	p4	f4	e4
21	MEMORY	b5	c5	z4

PinNo	com1	com2	com3	com4
22	h5	j5	l5	k5
23	g5	n5	m5	d5
24	a5	p5	f5	e5
25	RDS	b6	c6	ST
26	h6	j6	l6	k6
27	g6	n6	m6	d6
28	a6	p6	f6	e6
29	r	b7	c7	q
30	h7	j7	l7	k7
31	g7	n7	m7	d7
32	a7	p7	f7	e7
33	TP	b8	c8	
34	h8	j8	l8	k8
35	g8	n8	m8	d8
36	a8	p8	f8	e8
37	EON	PTY	TI	TA
38				SRS(0)
39				com4
40			com3	
41		com2		
42	com1			

Figure 50 LCD SEGMENT

SHARP PARTS GUIDE

MODEL **XL-40H**
XL-50H

XL-40H/XL-50H Micro Component System consisting of XL-40H/XL-50H (main unit) and CP-XL40H/CP-XL50H (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. No. |
| 3. PART NO. | 4. DESCRIPTION |

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC Ceramic type
VCK Ceramic type
VCT Semiconductor type
VC •• MF Cylindrical type (without lead wire)
VC •• MN Cylindrical type (without lead wire)
VC •• TV Square type (without lead wire)
VC •• TQ Square type (without lead wire)
VC •• CY Square type (without lead wire)
VC •• CZ Square type (without lead wire)
VC J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD Carbon-film type
VRS Carbon-film type
VRN Metal-film type
VR •• MF Cylindrical type (without lead wire)
VR •• MN Cylindrical type (without lead wire)
VR •• TV Square type (without lead wire)
VR •• TQ Square type (without lead wire)
VR •• CY Square type (without lead wire)
VR •• CZ Square type (without lead wire)
VR J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:

Parts marked with "⚠" are important for maintaining the safety of the set.

Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

XL-40H/50H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
XL-40H/50H				
INTEGRATED CIRCUITS				
IC101	VHIBA3126N/-1	J	AF	Head Selector,BA3126N
IC102	VHIBA3311L/-1	J	AK	REC./P.B.Equalizer Amp., BA3311L
IC302	VHILC72131/-1	J	AP	PLL (Tuner) LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC401	VHILC75342M-1	J	AN	Function/Volume Equalizer, LC75342M
IC521	VHILC72723M-1	J	AS	RDS Circuit,LC72723M
IC601	VHILA4600/-1	J	AN	Power Amp.,LA4600
IC701	RH-IX0026SJZZ	J	AX	System Control Microcomputer, IX0026SJ
IC702	VHITA7291S/-1	J	AH	Loading Motor Driver,TA7291S
IC801	VHITA2109F/-1	J	AL	Servo Pre Amp.,TA2109F
IC802	VHITC9462F/-1	J	AZ	Servo/Signal Control,TC9462F
IC804	VHILA6541D/-1	J	AW	Focus/Tracking/Spin/ Sled Driver,LA6541D
TRANSISTORS				
Q101~106	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q151	VS2SC2001-K-1	J	AD	Silicon,NPN,2SC2001 K
Q152	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q153	VSKRC104M/-1	J	AC	Digital,NPN,KRC104 M
Q171	VSKRA102M/-1	J	AC	Digital,PNP,KRA102 M
Q172	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q301	VS2SC380-O/-1	J	AC	Silicon,NPN,2SC380 O
Q351	VSKRC104M/-1	J	AC	Digital,NPN,KRC104 M
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q521	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q601~603	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q604,605	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q606	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q607	VS2SD2012Y/-1	J	AF	Silicon,NPN,2SD2012 Y
Q608	VSKRA102M/-1	J	AC	Digital,PNP,KRA102 M
Q609	VSKRC107M/-1	J	AC	Digital,NPN,KRC107 M
Q681,682	VS2SD468-C/-1	J	AD	Silicon,NPN,2SD468 C
Q683	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q702,703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q706	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q707,708	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q709	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q801	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q861	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q901	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q902	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q903	VSKRC107M/-1	J	AC	Digital,NPN,KRC107 M
Q904	VSKRC102M/-1	J	AC	Digital,NPN,KRC102 M
Q905	VS2SB562-C/-1	J	AD	Silicon,PNP,2SB562 C
Q906	VSKRA102M/-1	J	AC	Digital,PNP,KRA102 M
DIODES				
D104	VHD1N4148/-1	J	AA	Silicon,1N4148
D301~304	VHD1N4148/-1	J	AA	Silicon,1N4148
D401~403	VHD1N4004/-1	J	AB	Silicon,1N4004
D521,522	VHD1N4148/-1	J	AA	Silicon,1N4148
D601~604	VHD1N4148/-1	J	AA	Silicon,1N4148
△ D651~654	VHD1N4004/-1	J	AB	Silicon,1N4004
△ D681~684	VHD1N4004/-1	J	AB	Silicon,1N4004
D685	VHD1N4004/-1	J	AB	Silicon,1N4004
D701~709	VHPMPG3372X-V	J	AD	LED,Green,MPG3372X
D720~723	VHD1N4148/-1	J	AA	Silicon,1N4148
D730	VHPHY2043/-1	J	AD	LED,Orange,HY2043
D732	VHPHY2043/-1	J	AD	LED,Orange,HY2043
D736,737	VHPHY2043/-1	J	AD	LED,Orange,HY2043
D901~904	VHD1N4148/-1	J	AA	Silicon,1N4148
VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
ZD351	VHEMTZJ5R1B-1	J	AC	Zener,5.1V,MTZJ5.1B
ZD601	VHEMTZJ130A-1	J	AC	Zener,13V,MTZJ13A
ZD602	VHEMTZJ7R5C-1	J	AC	Zener,7.5V,MTZJ7.5C
ZD681	VHEMTZJ6R8A-1	J	AA	Zener,6.8V,MTZJ6.8A
ZD682	VHEMTZJ5R6B-1	J	AD	Zener,5.6V,MTZJ5.6B
ZD701	VHEMTZJ3R3B-1	J	AA	Zener,3.3V,MTZJ3.3B

FILTERS

CF301,302	RFILF0072AFZZ	J	AG	FM IF
CF351	RFILF0003AWZZ	J	AK	FM IF
L354	RFILL0001AWZZ	J	AE	Low Pass Filter
△ LF651	RCILZ0002SJZZ	J	AG	Line Filter

TRANSFORMERS

CF352	RFILA0003SJZZ	J	AF	AM IF
T351	RCIL10004SJZZ	J	AF	AM IF
△ T651	RTRNP0024SJZZ	J	BC	Power,Main
△ T681	RTRNP0025SJZZ	J	AU	Power,Sub

COILS

L151	VP-MK331K0000	J	AB	330 μH,Choke
L341	RBLN-0001AWZZ	J	AD	Balun
L342	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
L351,352	VP-DH101K0000	J	AB	100 μH,Choke
L353	VP-DH102K0000	J	AB	1 mH,Choke
L521	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking
L601,602	RCILZ0001SJZZ	J	AD	0.3 mH,Coil
L603	VP-DH100K0000	J	AB	10 μH,Choke
L701	VP-DH101K0000	J	AB	100 μH,Choke
L801	VP-DH100K0000	J	AB	10 μH,Choke
L803	VP-DH100K0000	J	AB	10 μH,Choke
L804	VP-DH2R2K0000	J	AB	2.2 mmH,Peaking [Serial No.003XXXXX~]
T302	RCILA0007SJZZ	J	AG	AM Antenna
T306	RCILB0009SJZZ	J	AG	AM Oscillation

VARIABLE RESISTOR

VR351	RVR-M0999AFZZ	J	AB	10 kohm (B),Semi-VR [FM Mute Level]
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VIBRATORS

X351	RCRM-0007SJZZ	J	AG	Ceramic,456 kHz
X352	RCRSP0006SJZZ	J		Crystal,4.5 MHz
X521	RCRSP0005SJZZ	J	AF	Crystal,456 kHz
X701	RCRM-0008SJZZ	J	AG	Ceramic,8 MHz
X702	RCRSP0011AWZZ	J	AC	Crystal,32.768 kHz
X801	RCRM-0002SJZZ	J	AE	Ceramic,16.93 MHz

CAPACITORS

C101,102	VCKYTV1HB102K	J	AA	0.001 μF,50V
C103,104	VCKYTV1HB331K	J	AA	330 pF,50V
C105,106	VCKYTV1HB271K	J	AA	270 pF,50V
C107,108	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic
C109,110	VCQYKA1HM153J	J	AB	0.015 μF,50V,Mylar
C111,112	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic
C113,114	RC-GZA475AF1E	J	AB	4.7 μF,25V,Electrolytic
C115,116	VCKYTV1HB222K	J	AA	0.0022 μF,50V
C117	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic
C121,122	VCCSTV1HL820J	J	AA	82 pF,50V
C123	RC-GZA225AF1H	J	AB	2.2 μF,50V,Electrolytic
C125	RC-GZA107AF1E	J	AB	100 μF,25V,Electrolytic
C126	RC-GZA226AF1C	J	AB	22 μF,16V,Electrolytic
C129,130	RC-GZA475AF1E	J	AB	4.7 μF,25V,Electrolytic
C131	VCKYBT1HB821K	J	AA	820 pF,50V
C153	VCQPKA2AA392J	J	AB	0.0039 μF,100V,Polypropylene
C154	VCQYKA1HM273J	J	AB	0.027 μF,50V,Mylar
C155	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic
C301,302	VCKYTV1HB102K	J	AA	0.001 μF,50V
C329	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C330	VCCCPA1HH120J	J	AA	12 pF (CH),50V
C331	VCKYTV1EF473Z	J	AB	0.047 μF,25V
C332	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C334	VCCUPA1HJ270J	J	AA	27 pF (UJ),50V
C335	VCKYTV1HB561K	J	AA	560 pF,50V
C337	VCKYPA1HF223Z	J	AB	0.022 μF,50V
C341	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C343,344	VCCSTV1HL330J	J	AA	33 pF,50V
C345~347	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C348	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic
C349	VCKYTV1HB102K	J	AA	0.001 μF,50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C350,351	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C693,694	VCKYPA1HB331K	J	AA	330 pF,50V
C352	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C695	VCKYPA1HB102K	J	AA	0.001 μF,50V
C353,354	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C696	VCKYPA1HF103Z	J	AB	0.01 μF,16V
C355	VCCSTV1HL220J	J	AA	22 pF,50V	C697	VCKYPA1HB102K	J	AA	0.001 μF,50V
C356	VCKYTV1HB102K	J	AA	0.001 μF,50V	C698	VCKYBT1HB331K	J	AA	330 pF,50V
C357	RC-GZA225AF1H	J	AB	2.2 μF,50V,Electrolytic	C699	VCKYPA1HB332K	J	AA	0.0033 μF,50V
C358	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C701,702	VCCCTV1HH220J	J	AA	22 pF (CH),50V
C360,361	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C703,704	VCKYTV1EF223Z	J	AA	0.022 μF,25V
C362	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic	C710	VCKYTV1EB103K	J	AA	0.01 μF,25V
C363	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C711	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic
C364	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C712	VCKYTV1EB103K	J	AA	0.01 μF,25V
C365	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C713	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic
C366	VCKYTV1HB102K	J	AA	0.001 μF,50V	C714	VCKYTV1HB561K	J	AA	560 pF,50V
C367,368	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C715	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C369	VCCSTV1HL560J	J	AA	56 pF,50V	C771	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic
C370~372	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C772	VCKYTV1EB104K	J	AA	0.1 μF,25V
C373,374	VCTYPA1CX153K	J	AA	0.015 μF,16V	C773	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic
C376	VCKYTV1HB102K	J	AA	0.001 μF,50V	C801	VCCSPA1HL101J	J	AA	100 pF,50V
				[Serial No.003XXXXX~]	C802	VCKYTV1EB153K	J	AB	0.015 μF,25V
C380	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C803	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic
C381	VCCCTV1HH120J	J	AA	12 pF (CH),50V	C804	VCKYTV1EB103K	J	AA	0.01 μF,25V
C382	VCCCTV1HH150J	J	AA	15 pF (CH),50V	C805	VCKYTV1HB272K	J	AA	0.0027 μF,50V
C383	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C806	VCKYTV1HB472K	J	AA	0.0047 μF,50V
C384	VCKYTV1HB102K	J	AA	0.001 μF,50V	C807	VCKYTV1EB333K	J	AB	0.033 μF,25V
C385	VCTYPA1CX103K	J	AA	0.01 μF,16V	C809	VCKYTV1HB472K	J	AA	0.0047 μF,50V
C386	VCKYPA1HB331K	J	AA	330 pF,50V	C810	VCKYTV1HB102K	J	AA	0.001 μF,50V
C387	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C811	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic
C391	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic	C812	VCKYTV1EF103Z	J	AA	0.01 μF,25V
C392	VCKYTV1HB102K	J	AA	0.001 μF,50V	C813	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C393	RC-GZA105AF1H	J	AB	1 μF,50V,Electrolytic	C817~819	VCKYTV1EB104K	J	AA	0.1 μF,25V
C394	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic	C820	VCKYTV1EF103Z	J	AA	0.01 μF,25V
C395	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C821	VCKYTV1EB104K	J	AA	0.1 μF,25V
C396	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic	C822	RC-GZA227AF1A	J	AB	220 μF,10V,Electrolytic
C397	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C823	VCKYTV1EF103Z	J	AA	0.01 μF,25V
C398	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic	C824,825	VCKYTV1EB563K	J	AA	0.056 μF,25V
C399	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C828,829	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C401~406	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C830	VCKYTV1EB563K	J	AA	0.056 μF,25V
C415,416	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C831,832	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic
C417,418	RC-GZA225AF1H	J	AB	2.2 μF,50V,Electrolytic	C833,834	VCKYTV1HB471K	J	AA	470 pF,50V
C419,420	VCKYTV1HB272K	J	AA	0.0027 μF,50V	C835	VCKYTV1EB563K	J	AA	0.056 μF,25V
C421~424	RC-QZA104AFYJ	J	AC	0.1 μF,50V,Mylar	C836	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C425,426	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C837	VCKYTV1HB471K	J	AA	470 pF,50V
C429	RC-GZA336AF1C	J	AB	33 μF,16V,Electrolytic	C838	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic
C430	RC-GZA107AF1C	J	AB	100 μF,16V,Electrolytic	C839	VCCSTV1HL2R0C	J	AA	2 pF,50V
C521	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic	C840,841	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C522	VCKYTV1HB331K	J	AA	330 pF,50V	C842	RC-GZA476AF1A	J	AB	47 μF,10V,Electrolytic
C523	VCKYTV1EF104Z	J	AA	0.1 μF,25V	C843	VCKYTV1EF104Z	J	AA	0.1 μF,25V
C524	VCKYTV1HB561K	J	AA	560 pF,50V	C844	VCKYTV1HB682K	J	AA	0.0068 μF,50V
C525,526	VCCCTV1HH220J	J	AA	22 pF (CH),50V	C845	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C527	VCKYTV1EF104Z	J	AA	0.1 μF,25V	C846,847	VCKYTV1EF104Z	J	AA	0.1 μF,25V
C535	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic	C848	VCCSTV1HL390J	J	AA	39 pF,50V
C536	VCKYTV1EF223Z	J	AA	0.022 μF,25V	C849	VCKYTV1EB563K	J	AA	0.056 μF,25V
C537	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C850	RC-GZA227AF1A	J	AB	220 μF,10V,Electrolytic
C601	RC-GZA336AF1C	J	AB	33 μF,16V,Electrolytic	C855	RC-GZA107AF1A	J	AB	100 μF,10V,Electrolytic
C603,604	VCKYTV1HB102K	J	AA	0.001 μF,50V	C857	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic
C605,606	RC-GZA475AF1E	J	AB	4.7 μF,25V,Electrolytic	C859	RC-GZA477AF1A	J	AC	470 μF,10V,Electrolytic
C607	RC-GZA107AF1E	J	AB	100 μF,25V,Electrolytic	C860	VCKYTV1EF104Z	J	AA	0.1 μF,25V
C608	RC-GZA226AF1E	J	AB	22 μF,25V,Electrolytic	C861	VCKYPA1HB102K	J	AA	0.001 μF,50V
C613,614	RC-GZV108AF1E	J	AD	1000 μF,25V,Electrolytic	C862	VCKYPA1HB222K	J	AA	0.0022 μF,50V
C615	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C863	VCKYTV1HB471K	J	AA	470 pF,50V
C616	RC-GZW478AF1E	J	AG	4700 μF,25V,Electrolytic	C887	VCKYTV1HB272K	J	AA	0.0027 μF,50V
C617,618	VCKYPA1HB222K	J	AA	0.0022 μF,50V	C901	VCKYTV1HB102K	J	AA	0.001 μF,50V
C620	RC-GZV477AF1E	J	AC	470 μF,25V,Electrolytic	C902	RC-GZA335AF1H	J	AB	3.3 μF,50V,Electrolytic
C621	RC-GZA107AF1E	J	AB	100 μF,25V,Electrolytic	C903	RC-GZA107AF1E	J	AB	100 μF,25V,Electrolytic
C622	VCKYPA1HF223Z	J	AB	0.022 μF,50V	C904,905	VCKYTV1HF223Z	J	AA	0.022 μF,50V
C624	VCKYPA1HF223Z	J	AB	0.022 μF,50V					
C625	RC-GZA106AF1C	J	AB	10 μF,16V,Electrolytic					
C626	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic					
C627	VCKYTV1EF223Z	J	AA	0.022 μF,25V					
C632,633	VCKYPA1HF223Z	J	AB	0.022 μF,50V					
C636,637	VCKYPA1HF223Z	J	AB	0.022 μF,50V					
C639,640	VCKYPA1HF103Z	J	AB	0.01 μF,16V					
△ C651,652	VCFYFA1HA104J	J	AC	0.1 μF,50V,Thin Film					
△ C653,654	VCFYFA1HA104J	J	AC	0.1 μF,50V,Thin Film					
C660	VCKYPA1HF103Z	J	AB	0.01 μF,16V					
C661~663	VCKYPA1HB821K	J	AA	820 pF,50V					
C683	RC-GZV228AF1C	J	AG	2200 μF,16V,Electrolytic					
C684	VCFYFA1HA473J	J	AB	0.047 μF,50V,Thin Film					
C685	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic					
C686	VCKYPA1HF223Z	J	AB	0.022 μF,50V					
C688	VCKYPA1HF223Z	J	AB	0.022 μF,50V					
C689	RC-GZA476AF1C	J	AB	47 μF,16V,Electrolytic					

RESISTORS

	VRS-TV2AB000J	J	AA	0 ohm,Jumper,1.25×2mm,Green
R7A0	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7A1	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7A2	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R7A3	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R7A4	VRS-TV2AB121J	J	AA	120 ohms,1/10W
R7A5	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R7A6	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7A7	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7A8	VRS-TV2AB820J	J	AA	82 ohms,1/10W
R7A9	VRD-ST2CD332J	J	AA	3.3 kohms,1/6W
R7B0	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R7B2	VRS-TV2AB473J	J	AA	47 kohms,1/10W

XL-40H/50H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R7B3	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W	R391,392	VRD-ST2EE391J	J	AA	390 ohms,1/4W
R7D1	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R393	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7D2	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R395	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R7D3	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R415~420	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7D4	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R423~425	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R7D5	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R435,436	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R7D6	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R437,438	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R7D8	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R439,440	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W
R7D9	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R521	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R7E1	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R528,529	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R80A	VRS-TV2AB823J	J	AA	82 kohms,1/10W	R532	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R80B	VRS-TV2AB683J	J	AA	68 kohms,1/10W	R533,534	VRD-ST2CD563J	J	AA	56 kohms,1/6W
R80C	VRS-TV2AB823J	J	AA	82 kohms,1/10W	R601~604	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R80E	VRD-ST2CD823J	J	AA	82 kohms,1/6W	R607	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R80F	VRS-TV2AB823J	J	AA	82 kohms,1/10W	R608	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R80G	VRD-ST2CD683J	J	AA	68 kohms,1/6W	R615,616	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W
R101,102	VRD-ST2CD102J	J	AA	1 kohm,1/6W	R617	VRS-TV2AB333J	J	AA	33 kohms,1/10W
R103,104	VRS-TV2AB121J	J	AA	120 ohms,1/10W	R619,620	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R105	VRS-TV2AB154J	J	AA	150 kohms,1/10W	R621	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R106	VRD-ST2CD154J	J	AA	150 kohms,1/6W	R623	VRS-TV2AB223J	J	AA	22 kohms,1/10W
R107	VRD-ST2CD103J	J	AA	10 kohm,1/6W	R624	VRD-ST2EE102J	J	AA	1 kohm,1/4W
R108	VRS-TV2AB103J	J	AA	10 kohm,1/10W	R625	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R109,110	VRS-TV2AB392J	J	AA	3.9 kohms,1/10W	R627	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R111,112	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W	R628	VRD-ST2EE101J	J	AA	100 ohm,1/4W
R113,114	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W	R629	VRD-ST2EE821J	J	AA	820 ohms,1/4W
R115,116	VRS-TV2AB153J	J	AA	15 kohms,1/10W	R631,632	VRD-ST2EE6R8J	J	AA	6.8 ohms,1/4W
R117,118	VRS-TV2AB223J	J	AA	22 kohms,1/10W	R633	VRD-ST2EE2R2J	J	AA	2.2 ohms,1/4W
R119,120	VRS-TV2AB101J	J	AA	100 ohm,1/10W	R634	VRD-ST2EE332J	J	AA	3.3 kohms,1/4W
R121~124	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W	R661,662	VRD-ST2EE331J	J	AA	330 ohms,1/4W
R125	VRS-TV2AB104J	J	AA	100 kohm,1/10W	R681	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R126	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W	R682	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R131	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W	R683	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R132	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W	R684	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R133	VRS-TV2AB102J	J	AA	1 kohm,1/10W	R685	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R134	VRS-TV2AB104J	J	AA	100 kohm,1/10W	R686	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R138	VRD-ST2EE331J	J	AA	330 ohms,1/4W	R701	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R139	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W	R702	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R140	VRS-TV2AB103J	J	AA	10 kohm,1/10W	R705	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R141	VRD-ST2CD331J	J	AA	330 ohms,1/6W	R706	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R151	VRS-TV2AB473J	J	AA	47 kohms,1/10W	R707	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R152	VRS-TV2AB104J	J	AA	100 kohm,1/10W	R708	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W
R153,154	VRS-TV2AB103J	J	AA	10 kohm,1/10W	R709	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R155	VRD-ST2EE560J	J	AA	56 ohms,1/4W	R710,711	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R156,157	VRD-ST2EE151J	J	AA	150 ohms,1/4W	R715	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R323	VRS-TV2AB683J	J	AA	68 kohms,1/10W	R716	VRD-ST2CD272J	J	AA	2.7 kohms,1/6W
R336	VRD-ST2CD103J	J	AA	10 kohm,1/6W	R717	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R343	VRD-ST2CD181J	J	AA	180 ohms,1/6W	R718	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R344	VRS-TV2AB681J	J	AA	680 ohms,1/10W	R719,720	VRD-ST2CD122J	J	AA	1.2 kohms,1/6W
R345	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W	R721,722	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R346	VRD-ST2CD331J	J	AA	330 ohms,1/6W	R723	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R347	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W	R724	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W
R348	VRS-TV2AB681J	J	AA	680 ohms,1/10W	R725	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R349	VRS-TV2AB330J	J	AA	33 ohms,1/10W	R727	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R350	VRS-TV2AB272J	J	AA	2.7 kohms,1/10W	R728	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R351	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W	R729	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R352	VRS-TV2AB102J	J	AA	1 kohm,1/10W	R730~734	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R353	VRS-TV2AB271J	J	AA	270 ohms,1/10W	R737~746	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R355	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W	R747~749	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R356	VRS-TV2AB102J	J	AA	1 kohm,1/10W	R750,751	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R357	VRS-TV2AB474J	J	AA	470 kohms,1/10W	R752	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R358	VRS-TV2AB822J	J	AA	8.2 kohms,1/10W	R753,754	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R359	VRS-TV2AB182J	J	AA	1.8 kohms,1/10W	R757~768	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R360	VRS-TV2AB472J	J	AA	4.7 kohms,1/10W	R771~777	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R361,362	VRS-TV2AB123J	J	AA	12 kohms,1/10W	R778~781	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R363	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W	R782,783	VRS-TV2AB333J	J	AA	33 kohms,1/10W
R364	VRS-TV2AB682J	J	AA	6.8 kohms,1/10W	R784	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R365	VRS-TV2AB103J	J	AA	10 kohm,1/10W	R785	VRS-TV2AB102J	J	AA	1 kohm,1/10W
R366	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W	R786	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R369A	VRS-TV2AB680J	J	AA	68 ohms,1/10W	R787	VRD-RT2HD2R2J	J	AA	2.2 ohms,1/2W
R369B	VRS-TV2AB820J	J	AA	82 ohms,1/10W	R789	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R371~374	VRD-ST2AB102J	J	AA	1 kohm,1/10W	R792	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R376	VRD-ST2CD103J	J	AA	10 kohm,1/6W	R793	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R377	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W	R794~797	VRD-ST2CD181J	J	AA	180 ohms,1/6W
R379	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W	R798	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R380	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W	R799	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R381	VRS-TV2AB103J	J	AA	10 kohm,1/10W	R801	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R382	VRD-ST2EE331J	J	AA	330 ohms,1/4W	R802	VRS-TV2AB473J	J	AA	47 kohms,1/10W
R383	VRS-TV2AB562J	J	AA	5.6 kohms,1/10W	R804	VRS-TV2AB104J	J	AA	100 kohm,1/10W
R384	VRD-ST2CD682J	J	AA	6.8 kohms,1/6W	R806	VRS-TV2AB153J	J	AA	15 kohms,1/10W
R385	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W	R807	VRS-TV2AB103J	J	AA	10 kohm,1/10W
R386	VRD-ST2EE331J	J	AA	330 ohms,1/4W	R808	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W	R809	VRS-TV2AB103J	J	AA	10 kohm,1/10W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION	NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R810	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W	△ SO651	QSOCA0004SJZZ	J	AH	Socket,AC Power Input
R811	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W	SOL901(237-4)	9GD19212118	J	AP	Solenoid Ass'y
R812	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W	SW700	QSW-Z0001SJZZ	J	AF	Switch,Push Type [JOG]
R813	VRD-ST2EE100J	J	AA	10 ohm,1/4W	SW709	QSW-K0002SJZZ	J	AC	Switch,Key Type [ON/STAND-BY]
R814	VRS-TV2AB332J	J	AA	3.3 kohms,1/10W	SW710	QSW-K0002SJZZ	J	AC	Switch,Key Type [CLOCK/TIMER/SLEEP]
R815,816	VRD-ST2CD103J	J	AA	10 kohm,1/6W	SW711	QSW-K0002SJZZ	J	AC	Switch,Key Type [TUNING UP]
R817,818	VRS-TV2AB102J	J	AA	1 kohm,1/10W	SW712	QSW-K0002SJZZ	J	AC	Switch,Key Type [PLAY/CD PAUSE]
R819	VRD-ST2CD221J	J	AA	220 ohms,1/6W	SW713	QSW-K0002SJZZ	J	AC	Switch,Key Type [VOLUME SELECT]
R820	VRS-TV2AB102J	J	AA	1 kohm,1/10W	SW714	QSW-K0002SJZZ	J	AC	Switch,Key Type [DISPLAY MODE]
R821	VRD-ST2CD151J	J	AA	150 ohms,1/6W	SW715	QSW-K0002SJZZ	J	AC	Switch,Key Type [ASPM]
R822	VRD-ST2EE220J	J	AA	22 ohms,1/4W	SW716	QSW-K0002SJZZ	J	AC	Switch,Key Type [EON]
R823	VRD-ST2CD102J	J	AA	1 kohm,1/6W	SW717	QSW-K0002SJZZ	J	AC	Switch,Key Type [PTY.TI]
R824	VRS-TV2AB273J	J	AA	27 kohms,1/10W	SW721	QSW-K0002SJZZ	J	AC	Switch,Key Type [MEMORY/SET]
R825	VRS-TV2AB823J	J	AA	82 kohms,1/10W	SW722	QSW-K0002SJZZ	J	AC	Switch,Key Type [BASS/TREBLE]
R826	VRS-TV2AB272J	J	AA	2.7 kohms,1/10W	SW723	QSW-K0002SJZZ	J	AC	Switch,Key Type [BAND]
R827	VRS-TV2AB273J	J	AA	27 kohms,1/10W	SW724	QSW-K0002SJZZ	J	AC	Switch,Key Type [REC.PAUSE]
R828	VRS-TV2AB122J	J	AA	1.2 kohms,1/10W	SW725	QSW-K0002SJZZ	J	AC	Switch,Key Type [STOP/CLEAR]
R829	VRD-ST2CD683J	J	AA	68 kohms,1/6W	SW726	QSW-K0002SJZZ	J	AC	Switch,Key Type [TUNING DOWN]
R843	VRD-ST2CD102J	J	AA	1 kohm,1/6W [Serial No.003XXXXX~]	SW727	QSW-K0002SJZZ	J	AC	Switch,Key Type [FUNCTION]
R852~855	VRS-TV2AB104J	J	AA	100 kohm,1/10W	SW728	QSW-K0002SJZZ	J	AC	Switch,Key Type [VOLUME/JOG]
R861~863	VRS-TV2AB222J	J	AA	2.2 kohms,1/10W	SW801	QSW-P0004AWZZ	J	AE	Switch,Push Type [Open/Close]
R901	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W	SW901(237-7)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
R902	VRD-ST2CD563J	J	AA	56 kohms,1/6W	SW902(237-8)	9GD640101210	J	AE	Switch,Leaf Type [Cam]
R903	VRS-TV2AB473J	J	AA	47 kohms,1/10W					
R904	VRS-TV2AB271J	J	AA	270 ohms,1/10W					
R905	VRS-TV2AB103J	J	AA	10 kohm,1/10W					
R906	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W					
R907	VRD-ST2CD103J	J	AA	10 kohm,1/6W					
R909	VRS-TV2AB183J	J	AA	18 kohms,1/10W					
R910	VRS-TV2AB333J	J	AA	33 kohms,1/10W					
OTHER CIRCUITRY PARTS					CD MECHANISM PARTS				
BI605/CNS605	QCNWN0179SJZZ	J	AF	Connector Ass'y,7/7Pin	301	NGERH0586AFZZ	J	AC	Gear,Middle
BI652/CNS652	QCNWN0178SJZZ	J	AC	Connector Ass'y,2/2Pin	302	NGERH0587AFZZ	J	AC	Gear,Drive
BI702/CNS702	QCNWN0180SJZZ	J	AE	Connector Ass'y,10/10Pin	303	MLEVP1054AFZZ	J	AC	Rail,Guide
BI706/CNS706	QCNWN0185SJZZ	J	AC	Connector Ass'y,3/3Pin	304	NSFTM0291AFFW	J	AD	Shaft,Guide
BI707/CNS707	QCNWN0125SJZZ	J	AE	Connector Ass'y,3/3Pin	305	PCUSG0613AFZZ	J	AC	Cushion
BI801/CNS801	QCNWN0186SJZZ	J	AF	Connector Ass'y,8/8Pin	△ 306	DCTRH8004SJ01	J	BC	Pickup Unit Ass'y
BI802/CNS802	QCNWN0187SJZZ	J	AE	Connector Ass'y,7/7Pin	306- 1	—	—	—	Pickup Unit (Not Replacement Item)
BI803/CNS803	QCNWN0188SJZZ	J	AE	Connector Ass'y,6/6Pin	306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
BI901/CNS901	QCNWN0176SJZZ	J	AE	Connector Ass'y,7/7Pin	306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
CFM901	—	—	—	Flat Wire,2Pin (Supplies at REF.No.PWB-D)	307	PCOV P1333AFSA	J	AF	Cover,Mechanism
CFW601	QCNWN0201SJZZ	J	AB	Flat Wire,5Pin	701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
CFW701	QCNWN0200SJZZ	J	AB	Flat Wire,2Pin	702	XHBSD20P05000	J	AA	Screw,ø2×5mm
CFW704	QCNWN0183SJZZ	J	AD	Flat Wire,12Pin	703	XBBSD20P03000	J	AA	Screw,ø2×3mm
CFW807	QCNWN0182SJZZ	J	AB	Flat Wire,2Pin	704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×ø3.8×0.25mm
CNP101	QCNCM931HAFZZ	J	AC	Plug,8Pin	NM801	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]
CNP301	QCNCM602BAFZZ	J	AA	Plug,2Pin	NM802	RMOTV0408AFM3	J	AN	Motor with Chassis [Spindle]
CNP605	QCNCM705GAFZZ	J	AB	Plug,7Pin	NSW801	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]
CNP652,653	QCNCM998BAFZZ	J	AC	Plug,2Pin					
CNP681	QCNCM603CAFZZ	J	AB	Plug,3Pin					
CNP702	QCNCM004KSJZZ	J	AC	Plug,10Pin					
CNP703	QCNCM010LAWZZ	J	AC	Plug,11Pin					
CNP705	QCNCM932BAFZZ	J	AA	Plug,2Pin					
CNP706	QCNCM932CAFZZ	J	AA	Plug,3Pin					
CNP803	QCNCM932FAFZZ	J	AC	Plug,6Pin					
CNP901	—	—	—	Plug,7Pin (Supplies at REF.No.PWB-D)					
CNS101	QCNWN0175SJZZ	J	AG	Connector Ass'y,8Pin	201	CPNLC1045SJ01	J	AN	Front Panel Ass'y [XL-40H]
CNS703	QCNCW010LAWZZ	J	AD	Socket,11Pin	201	CPNLC1045SJ03	J	AN	Front Panel Ass'y [XL-50H]
CNS704	QCNCW623MAFZZ	J	AC	Socket,12Pin	201- 1	—	—	—	Front Panel (Not Replacement Item)
CNS705	QCNWN0184SJZZ	J	J	Connector Ass'y,2Pin	201- 2	JKNBZ0037SJSA	J	AE	Button,Operation B [XL-40H]
△ F651	QFS-C252ASJN1	J	AH	Fuse,T2.5A L 250V	201- 2	JKNBZ0037SJSB	J	AE	Button,Operation B [XL-50H]
△ F653	QFS-C102ASJN1	J	AE	Fuse,T1A L 250V	201- 3	PCOV S3004SJFW	J	AC	Shield Cover
FE301	RTUNS0012AWZZ	J	AV	FM Front End	201- 4	PCUSG0003SJZZ	J	AC	Cushion,Leg
J601	QJAKM0001SJZZ	J	AG	Jack,Headphones	201- 5	QCNWN0219SJZZ	J	AC	Lead Wire with Lug
LCD701	RV-LX0007SJZZ	J	AR	LCD Display	201- 6	GDORF0010SJSA	J	AG	Cassette Holder [XL-40H]
M701	RMOTV0409AFZZ	J	AL	Motor [JOG]	201- 6	GDORF0014SJSA	J	J	Cassette Holder [XL-50H]
M901(237-9)	9GD192112344	J	AY	Motor with Pulley [Tape]	201- 7	HDEC P0001SJSA	J	AF	Decoration Plate,LCD Display
NM801	RMOTV0409AFM1	J	AN	Motor with Gear [Sled]	201- 8	HDEC P0002SJSA	J	AF	Decoration Plate, Cassette Holder [XL-40H]
NM802	RMOTV0408AFM3	J	AN	Motor with Chassis [Spindle]	201- 8	HDEC P0002SJSB	J	AF	Decoration Plate, Cassette Holder [XL-50H]
NSW801	QSW-F9001AWZZ	J	AE	Switch,Push Type [Pickup In]	201- 9	HDECQ0028SJSA	J	AE	LCD Window
PH901	—	—	—	Photo Interrupter (Supplies at REF.No.PWB-E)	201-10	HDECQ0029SJSA	J	AE	Cassette Holder Window
△ RLY681	RRLYD0004SJZZ	J	AG	Relay	201-11	JKNBZ0035SJSA	J	AE	Button,Operation A [XL-40H]
RX701	VHLN64H380A-1	J	AK	Remote Sensor,N64H380A	201-11	JKNBZ0035SJSB	J	J	Button,Operation A [XL-50H]
SO301	QTANC0001SJZZ	J	AF	Socket,FM Antenna	201-12	MSPRD0006SJFJ	J	AC	Spring,Cassette Holder
SO601	QTANA0007SJZZ	J	AF	Terminal,Speaker	201-13	LX-EZ0001SJFN	J	AB	Screw,ø2.5×10mm
					203	CGERH0001SJ01	J	AF	Cassette Holder Damper Gear Ass'y
					208	HDECQ0033SJSA	J	AD	Ring,JOG Dial Knob

XL-40H/50H

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
209	JKNBK0025SJSA	J	AC	Knob,JOG Dial [XL-40H]
209	JKNBK0025JSB	J	AC	Knob,JOG Dial [XL-50H]
210	GCABC1039SJSA	J	AH	Top Cabinet
211	MLEVP0001SJSA	J	AL	Lever,CD Eject Button
212	GDORT0003SJSA	J	AF	CD Lid
213	CHLDZ1003SJ01	J	AG	CD Lid Damper Gear Ass'y
214	JKNBZ0029SJSC	J	AC	Button,CD Eject
215	MSPRD0013SJFJ	J	AC	Spring,CD Lid
216	CHLDM1002SJ01	J	AH	Stabilizer Ass'y
216- 1	—	—	—	Stabilizer (Not Replacement Item)
216- 2	PMAGF0002AWZZ	J	AE	Magnet
217	GITAS0003SJSA	J	AG	Side Panel,Left
218	GITAS0004SJSA	J	AG	Side Panel,Right
219	TLABS0003SJZZ	J	AD	Label,Class 3A
220	TLABS0004SJZZ	J	AC	Label,Laser
221	GCABB1020SJSB	J	AL	Rear Panel [XL-50H]
221	GCABB1043SJSA	J	AF	Rear Panel [XL-40H]
222	PCOV33001SJFW	J	AG	Bracket,FM/AM Socket/Speaker Terminal
223	LCHSM0004SJFW	J	AN	Main Chassis
224	LANGF0020SJFW	J	AC	Bracket,Sub Transformer
225	LHLDW1001SJZZ	J	AD	Nylon Band
226	QCNWN0148SJZZ	J	AD	Lead Wire with Lug
△ 227	QFSDH0001AWZZ	J	AB	Holder,Fuse
228	LANGK0019SJFW	J	AB	Bracket,Display PWB/Main PWB
230	PRDAR0016SJFW	J	AF	Heat Sink
231	PCOV33003SJFW	J	AD	Shield Cover,Main PWB
232	PSHEP0001SJZZ	J	AF	Sheet,LCD Display
233	LHLDZ1010SJSA	J	AE	Holder,LCD Display
234	LHLDZ1022SJSA	J	AB	Holder,LED
237	CMECB0004SJ01	J	BC	Tape Mechanism Ass'y
237- 1	94R19210703	J	AE	Belt,FF/REW
237- 2	9GD19210943	J	AG	Belt,Main
237- 3	94R192104309	J	AG	Pinch Roller Arm Ass'y
237- 4(SOL901)	9GD19212118	J	AP	Solenoid Ass'y
237- 5	9GD62161401	J	AN	Head,Erase
237- 6	94R62010111	J	AT	Head,Record/Playback
237- 7(SW901)	9GD640101210	J	AE	Switch,Leaf Type [Fool Proof]
237- 8(SW902)	9GD640101210	J	AE	Switch,Leaf Type [Cam]
237- 9(M901)	9GD192112344	J	AY	Motor with Pulley [Tape]
237-10(PWB-D)	9GD192121303	J	AZ	Tape Mechanism PWB Ass'y
237-11(PWB-E)	9GD192121304	J	AW	Tape Mechanism PWB Ass'y
238	QCNWN0147SJZZ	J	AC	Lead Wire with Lug
240	LHLDZ1023SJZZ	J	AD	Holder,JOG Motor
241	LHLDZ1024SJZZ	J	AC	Holder,JOG Motor Tray
242	LHLDZ1026SJZZ	J	AC	Holder,JOG Motor Guide
243	NBLTK0001SJZZ	J	AA	Belt,JOG Motor
244	NGERW0001SJZZ	J	AD	Gear,Worm
245	NGERW0002SJZZ	J	AD	Wheel,JOG Worm
246	NPLYP0001SJZZ	J	AB	Pulley,JOG Motor
247	PCOVU9001SJZZ	J	AC	Sheet,JOG Motor Guide Holder
601	XEBSD25P10000	J	AA	Screw,ø2.5×10mm
603	XEBSF25P08000	J	AA	Screw,ø2.5×8mm
604	XJBSD30P08000	J	AA	Screw,ø3×8mm
605	LX-JZ0001SJFD	J	AA	Screw,ø3×10mm
608	XHBSD20P05000	J	AA	Screw,ø2×5mm
609	XEBSD25P14000	J	AA	Screw,ø2.5×14mm
610	XESSD25P12000	J		Screw,ø2.5×12mm
611	XESSD30P10000	J	AA	Screw,ø3×10mm
612	XHBSD30P06000	J	AA	Screw,ø3×6mm
613	XJBSF30P10000	J	AA	Screw,ø3×10mm

ACCESSORIES/PACKING PARTS

△	QACCE0001SJZZ	J	AH	AC Power Supply Cord
	QANTL0002SJZZ	J	AM	AM Loop Antenna
	QANTW0002SJZZ	J	AH	FM Antenna
	SPAKA0030SJZZ	J	AF	Packing Add.,Side
	SPAKA0038SJZZ	J	AF	Packing Add.,Top
	SPAKA0039SJZZ	J	AF	Packing Add.,Bottom
	SPAKC0095SJZZ	J	AM	Packing Case [XL-40H]
	SPAKC0098SJZZ	J		Packing Case [XL-50H]
	SPAKP0005SJZZ	J	AC	Polyethylene Bag,Unit
	SPAKZ0019SJZZ	J	AC	Protection Sheet,Top/Bottom
	SSAKA0002SJZZ	J	AE	Polyethylene Bag,Accessories
	TINSZ0052SJZZ	J	AM	Operation Manual
	TLABE0054SJZZ	J		Label,Bar Code
	TLABM0019SJZZ	J	AC	Label,Feature
	TLABN0066SJZZ	J		Label,Serial No. [XL-40H]
	TLABN0067SJZZ	J		Label,Serial No. [XL-50H]

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	TLABZ0030SJZZ	J	AC	Label,Ecology
	RRMCG0013SJSB	J	AS	Remote Control
	GFTAB1021AWSB	J		Battery Lid,Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~8	DCEKK0012SJ03	J	—	Main/Display/CD/LED/ Headphones/Open•Close Switch/JOG Switch/Washer (Combined Ass'y)
△ PWB-B	DCEKA0001SJ06	J	—	Power
PWB-C	QPWBF3895AFZZ	J	AC	CD Motor (PWB Only)
PWB-D	9GD192121303	J	—	Tape Mechanism
PWB-E	9GD192121304	J	—	Tape Mechanism

OTHER SERVICE PART

UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner Disc
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CP-XL40H/50H

SPEAKER BOX PARTS

	GBOXS0001SJZZ	J		Speaker Ass'y [CP-XL40H]
	GBOXS0002SJZZ	J		Speaker Ass'y [CP-XL50H]
701	9GDYFY090B001	J		Front Panel Ass'y [CP-XL40H]
701	9GDYFY090B011	J		Front Panel Ass'y [CP-XL50H]
702	9GDYFY090B003	J		Speaker Box Ass'y
703	9GDYFY978B008	J	AF	Duct Pipe
704	9GDYFY910Q013	J	AE	Screw,ø4×12mm
705	9GDYFY910Q020	J	AD	Cushion,Speaker
706	9GDYFY978B010	J	AH	Cord,Speaker
707	9GDYFY090B008	J		Label,Specifications [CP-XL40H]
707	9GDYFY090B010	J		Label,Specifications [CP-XL50H]
SP601,602	VSD0010PBY24N	J		Speaker,Full-Range

PACKING PARTS

SPAKA0031SJZZ	J		Pad,Speaker
SPAKC0088SJZZ	J		Packing Case,Speaker
SPAKP0006SJZZ	J		Polyethylene Bag,Speaker
SPAKZ0008SJZZ	J		Pad,Bottom,Speaker
SPAKZ0009SJZZ	J		Pad,Center,Speaker

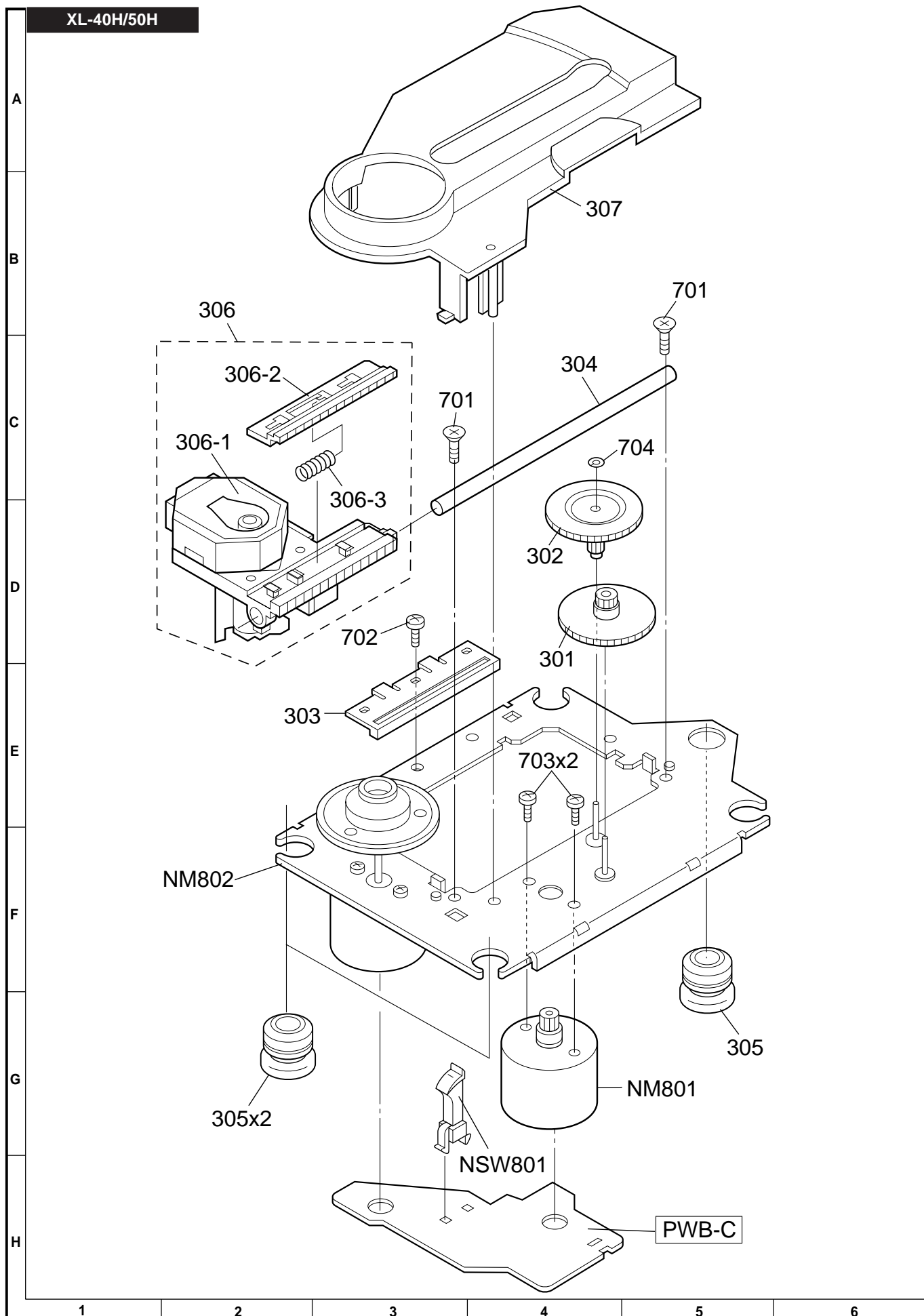


Figure 6 CD MECHANISM EXPLODED VIEW



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CP-XL40H/50H

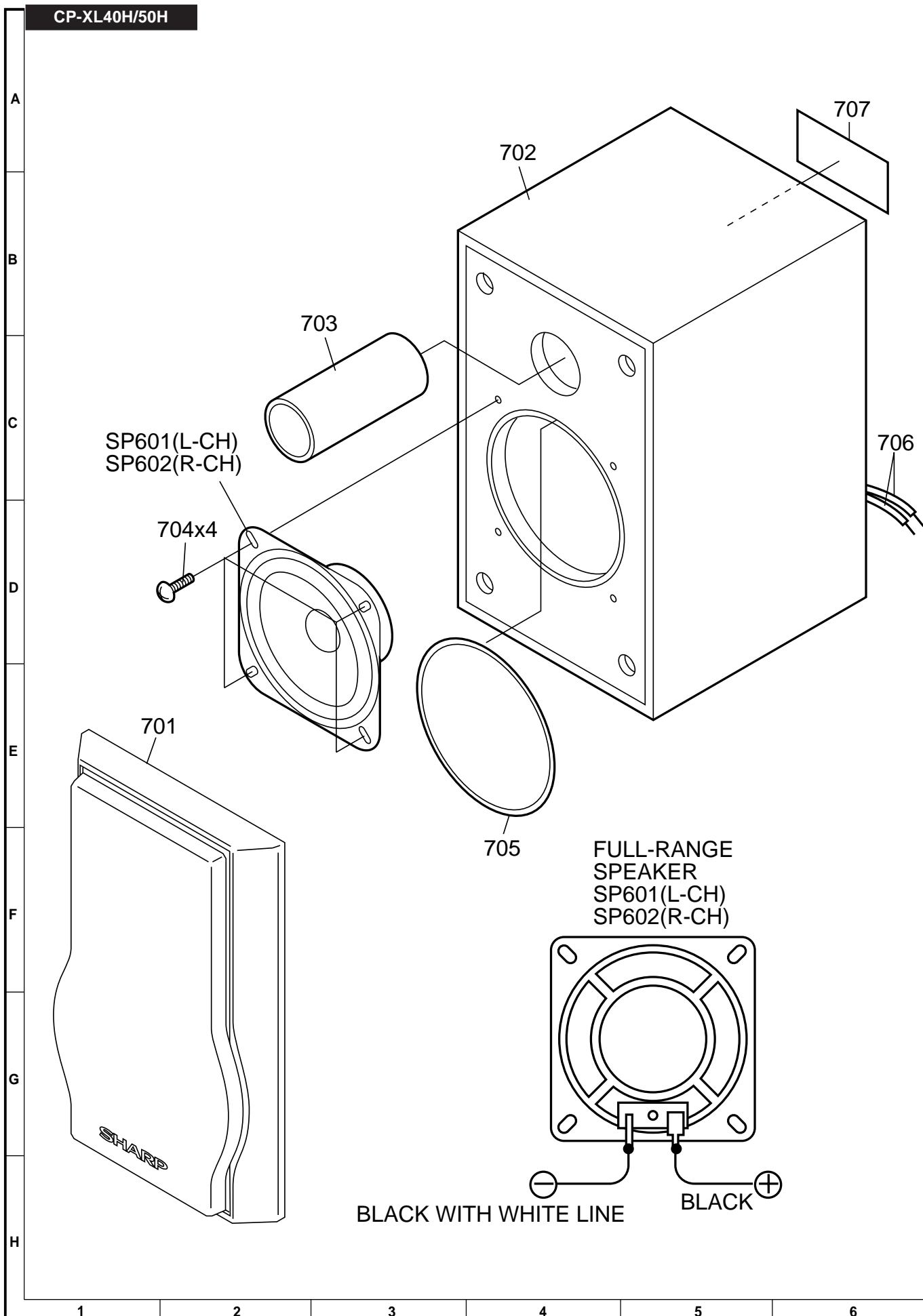


Figure 8 SPEAKER EXPLODED VIEW

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